State of Kansas
Application to Administer the Coal Combustion Residuals Permitting Program

July 18, 2018

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Table of Contents

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STATE OF KANSAS

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JEFF ANDERSEN, SECRETARY

July 18, 2018

Mr. Andrew Wheeler
Acting Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

Re: State of Kansas Application to Administer the Coal Combustion Residuals Permitting Program

Dear Mr. Wheeler:

As authorized by the WIIN Act, the Kansas Department of Health and Environment is hereby submitting the enclosed application packet to the U.S. Environmental Protection Agency seeking approval to administer the coal combustion residuals (CCR) permitting program. This comprehensive application packet includes:

- A narrative description of the permit program
- The Legal Certification from the Kansas Attorney General
- Copies of the Kansas CCR standards as well as other applicable laws, regulations, and policies
- The 40 CFR Part 257 Subtitle D Checklist
- A model CCR permit and generic inspection checklist
- The KDHE solid waste penalty matrix applicable to non-compliance with solid waste laws and regulations
- A letter of support from 100 percent of Kansas CCR facilities to implement the Kansas permitting and compliance & enforcement programs through CCR permits.

If you have any questions regarding this application, please contact Bill Bider, Director, Bureau of Waste Management at (785) 296-1612 or william.bider@ks.gov.

Sincerely,

Leo Henning
Director of Environment

Enclosure
cc/enc: Jim Gulliford, EPA Region 7
ec/enc: Mike Martin, EPA Region 7

Narrative

State of Kansas
Coal Combustion Residuals Permit Program Application

NARRATIVE

I. Introduction

Purpose

Pursuant to Section 4005(d)(1) of the Solid Waste Disposal Act (42 U.S.C. 6945), the State of Kansas through the Kansas Department of Health and Environment (KDHE) submits this application to the United States Environmental Protection Agency (EPA) seeking approval of the Kansas coal combustion residuals (CCR) permitting program. The KDHE CCR permitting program will consist of regulatory mechanisms that are as protective as the United States Code of Federal Regulations (CFR), Title 40, Part 257, Subpart D regulations: *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments*.

Background

KDHE is the sole state agency in Kansas with statutory authority for administration of the Kansas Solid Waste Regulatory Program. This authority is granted by Kansas Statutes Annotated (K.S.A.) 65-3401 through K.S.A. 65-3427 and the regulations adopted under the authority of those statutes; Kansas Administrative Regulations (K.A.R.) 28-29-1a through K.A.R. 28-29-2201. The Solid Waste Regulatory Program combines traditional regulatory activities such as permitting, inspections, and enforcement with technical assistance.

The Bureau of Waste Management (BWM) within KDHE has the primary responsibility for implementing the Kansas Solid Waste Management Program. The mission of BWM is "to minimize the environmental impact associated with the generation, storage, transportation, treatment, and disposal of all solid and hazardous wastes in Kansas."

On October 19, 2015, EPA granted conditional approval of Kansas' solid waste management plan which was prepared to implement the provisions of the federal CCR regulations. Under the Kansas plan, the existing state solid waste permits for each CCR unit were amended to ensure that all regulated activities were covered by permits and facility operating plans were updated in accordance with applicable federal standards. Beginning in 2016, KDHE has assessed compliance at all CCR facilities based upon applicable federal regulations despite not being officially authorized by EPA to administer this program. The KDHE plan specified that it was KDHE's intention to adopt the federal regulations by reference; however, that process was delayed based upon the passage of the Water and Infrastructure Improvements for the Nation (WIIN) Act. This Act authorizes states to adopt CCR regulations that incorporate some flexibilities to address the specific conditions within the state and in consideration of newly available state oversight authority as compared to the previous self-implementing regulatory program.

II. Jurisdiction and Responsibilities

KDHE has statutory authority to administer a solid waste permitting program and to enforce operational standards for the disposal and management of all types of solid waste, including CCR. With respect to CCR, such standards are as protective, or in some cases, more stringent or broader in scope than the requirements of the Part 257 CCR regulations.

K.S.A. 65-3406 authorizes and directs the Secretary of KDHE to adopt solid waste management regulations and standards necessary to protect the public health and environment; issue permits and orders; and conduct inspections.

K.S.A. 65-3407 states that, with some exceptions: "…no person shall construct, alter or operate a solid waste processing facility or a solid waste disposal area of a solid waste management system, except for clean rubble disposal sites, without first obtaining a permit from the secretary." CCR landfills and some surface impoundments fall under the definition of a "solid waste disposal area" in K.S.A. 65-3402(d) and other CCR surface impoundments fall under the definition of a solid waste processing facility in K.S.A. 65-3402(c). Both are subject to the state permitting requirement. More details regarding the permitting program authorities and requirements are presented in Section IV of this narrative.

Kansas has adequate legal authority to prohibit the establishment of new open dumps and to order the closure or upgrade of existing open dumps. K.S.A. 65-3409(a) prohibits the disposal of solid waste, including CCR, by "open dumping", as defined in K.S.A. 65-3402(j). K.S.A. 65-3419 provides enforcement authority for any violation of K.S.A. 65-3409(a). Since some surface impoundments temporarily store solid waste, they are classified as solid waste processing facilities and therefore are not considered open dumps.

K.S.A 65-3411 authorizes the Secretary of KDHE to order a person responsible for the management and disposal of solid waste to implement corrective measures whenever such management threatens to cause pollution of the land, air, or waters of the state, or is a hazard to property in the area or to public health and safety.

K.S.A. 65-3419 authorizes the Secretary of KDHE to carry out enforcement actions related to non-compliance with solid waste laws, regulations, permit conditions and orders of the Secretary, including the assessment of penalties and filing of actions in district court related to non-compliant practices. More details regarding KDHE authorities and enforcement procedures are presented in Section V.

K.A.R. 28-29-7(a) states that the Secretary of KDHE shall stipulate: "…special operating conditions, procedures, and changes necessary to comply with these and other state or federal laws and regulations." This authority allows for special permit conditions to be established for any solid waste permits. Each facility permit that is currently in place, covering every CCR unit, already includes the following general condition: "*This permit is subject to modification by the department at the time of any scheduled renewal or: (a) whenever the modification is needed to reflect changed state or federal rules, (b) to incorporate changes in the facility operations or closure plan, (c) to make other modifications proposed by the permittee and approved by the*

department, (d) whenever the department determines that modification is necessary to prevent or reduce actual or potential hazard(s) to the public health or safety, or pollution or contamination of the environment or, (e) because of changed or unforeseen circumstances. The filing of a request by permittee for a permit modification, or the filing of a notice of anticipated noncompliance does not stay any permit condition. Approval from KDHE must be obtained prior to any modifications to the landfill design, operational and closure plans approved with this permit or any development of new cells not detailed in those plans. Any minor modifications approved by KDHE are incorporated by reference."

Authority to inspect facilities and obtain records and samples is provided by K.S.A. 65-3406(a)(10) and K.A.R. 28-29-16. Certain reporting requirements are established in K.A.R. 28-29-23(f), which also allows KDHE to establish additional reporting requirements in permit conditions. K.A.R. 28-29-6a establishes procedures related to public participation and notice of permit actions including public hearings and opportunity for public comments. Public participation processes are addressed in more detail in Section IV.

III. Kansas Approach to the Implementation of Federal Requirements

This section describes the approach that the State of Kansas is proposing to implement the CCR permitting program in Kansas as allowed under the provisions of the WIIN Act. The WIIN Act states: *"Each State may submit to the Administrator, in such form as the Administrator may establish, evidence of a permit program or other system of prior approval and conditions under State law for regulation by the State of coal combustion residuals units that are located in the State . . ."*

EPA's published guidance to states emphasizes the need to initially develop and adopt state regulations to become approved to administer the CCR permitting program; however, the WIIN Act does not stipulate the adoption of regulations as a requirement for states to receive approval to administer the program. Instead, the WIIN Act emphasizes the requirement for a state "permit program" that demonstrates authority to "regulate" and enforce the CCR standards. In accordance with this primary goal of the WIIN Act, Kansas will incorporate comprehensive CCR standards into every facility CCR permit prior to the subsequent adoption of those standards as state regulations. These standards will consist primarily of the federal CCR regulations; however, as allowed by the WIIN Act, the Kansas standards will include certain flexibilities to address state conditions while maintaining equivalent protection of public health and the environment. These alternative state standards will allow facilities to propose designs and/or practices that differ from certain requirements of the Part 257 standards. Unlike the scenario of self-implementing regulations, under this new scenario, qualified engineers, geologists, and scientists within KDHE can assess proposals and determine if alternative design and/or operational concepts are equally protective. The WIIN Act specifically *"allows a State to include technical standards for individual permits or conditions of approval that differ from the criteria under part 257 . . .* (provided) *that the technical standards established pursuant to a State permit program . . . are at least as protective as the criteria under that part."*

This concept for state reviews, evaluations, and decision-making as Kansas' CCR standards are applied to permitted facilities is consistent with many other delegated environmental regulatory programs including, but not limited to, the RCRA hazardous waste permitting program, the RCRA Subtitle D municipal solid waste landfill permitting program, the leaking underground storage tank program, and a variety of other clean-up programs.

In addition to the Kansas CCR standards that are incorporated as a special condition into each CCR permit, numerous other general solid waste regulations will be applicable and enforced. These regulations listed in Section IV address many requirements that are broader in scope or more stringent than the Part 257 regulations.

The approach KDHE will follow to implement the Kansas CCR permitting program using the Kansas CCR standards and existing applicable regulations along with some estimates of the timeline for proposed actions include:

- KDHE has finalized and included in this application the Kansas CCR standards, including certain areas of regulatory flexibility that are equally protective as the federal CCR regulations. These standards will serve as the basis for CCR permit modifications and annual renewals, compliance monitoring, enforcement, and public participation. No new CCR permits will be issued until state CCR regulations are adopted.
- The Kansas CCR standards will be incorporated into every existing facility CCR permit as new enforceable permit conditions prior to the completion of EPA's review of this application. The effective date for the Kansas CCR standards, hence the new permit conditions, will be the date that EPA issues its approval of the Kansas CCR permitting program. The CCR permit modification process will include a public participation process and comment period. It will be during this process that the public will be able to address issues related to the comprehensive proposed alternative standards. All affected CCR facilities in Kansas have indicated their agreement to proceed in this manner to facilitate EPA's approval of the Kansas permitting program. The permit modifications to incorporate the Kansas CCR standards should be completed by August 31, 2018. These special permit conditions will only remain in effect until Kansas adopts state CCR regulations to replace the Kansas CCR standards. Given the likelihood that EPA will continue to modify the federal CCR regulations and the long time period required to complete the state regulation adoption process, this selected approach of an interim method to enforce CCR standards is most effective.
- From a state compliance assessment and enforcement perspective, the Kansas CCR standards will be similar in nature to other enforceable permit documents including such things as operating plans, groundwater monitoring plans, closure/post-closure plans, disposal cell design plans, etc. KDHE inspectors and permitting staff will routinely evaluate compliance with the Kansas CCR standards and all other applicable state laws and regulations and initiate enforcement actions as necessary.
- Until EPA issues its approval of the Kansas CCR permitting program, the current state permit conditions and federal CCR regulations will remain in effect. It is noteworthy that the current CCR facilities in Kansas are operating under a combination of the "self-

implementing" federal regulations and state laws, regulations, and permits that require thorough state oversight.

- The special permit condition incorporating the Kansas CCR standards into every permit would apply to any future permit modifications to expand CCR management and disposal areas at existing CCR facilities. New permits would not be issued for such modifications.
- As stated above, no new CCR permits will be issued in Kansas until state CCR regulations are adopted. KDHE intends to adopt the Kansas CCR standards as regulations over the next two years; however, the final version of the regulations that will be proposed when the adoption process begins is likely to include modifications to the current Kansas CCR standards based upon changes made by EPA to the federal regulations. Also, in response to public comments received by KDHE through the adoption process, additional modifications may be made. KDHE will maintain close communication with EPA during these proceedings to ensure that the final adopted rules continue to be adequately protective of public health and the environment.
- The development of CCR regulations to replace the CCR standards incorporated into each permit is similar to normal regulation updates that occur in many other state regulatory programs authorized by EPA. For example, EPA periodically reviews newly adopted state regulations and authorization packages related to the RCRA hazardous waste program while maintaining "authorization" through the regulation update process. Upon adopting the Kansas CCR regulations to replace the state standards, KDHE will submit a revised CCR permitting program application for EPA review and approval.

The special condition of each CCR permit that incorporates the Kansas CCR standards is provided below:

"The Kansas Coal Combustion Residuals (CCR) Standards are hereby incorporated into this permit. The effective date for these standards shall be the date that the United States Environmental Protection Agency (EPA) approves of the Kansas CCR permitting program. Until that date, the owners or operators of affected CCR units shall comply with the federal CCR standards (United States Code of Federal Regulations (CFR), Title 40, Part 257, Subtitle D Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments). The Kansas CCR standards shall remain in effect until the Kansas Department of Health and Environment adopts new CCR regulations to replace those standards."

If EPA makes changes to the CCR regulations over the next few years as anticipated, the changes may be incorporated into the Kansas CCR standards and CCR permits through permit modifications. If changes are substantial, the process would include a public notice and comment period.

The following is a comprehensive list of Kansas facilities with CCR units that are subject to regulation under the CCR rule. Appendix A presents the letter of agreement signed by representatives of these facilities; all have agreed to modify their CCR permits that cover one or more landfills (LFs) and/or surface impoundments (SIs). This pre-agreement is important with respect to a timely implementation of the proposed permitting plan. All affected facilities have

indicated that they will accept the proposed concept and process of permit modification to facilitate a prompt completion of the permit modifications. Appendix B contains a model/example permit which represents the format that will be used for every facility, the special condition that refers to the CCR standards including the timeline for applicability, and the CCR standards which will be part of every permit.

Permit	Owner - Facility	County	LF(s)	SI(s)
420	Holcomb Common Facilities, LLC – Holcomb Station	Finney	Yes	No
413	Kansas City Board of Public Utilities – Nearman Creek	Wyandotte	No	Yes
337	Kansas City Power & Light Company – La Cygne	Linn	Yes	Yes
359	Westar Energy, Inc. – Jeffrey Energy Center	Pottawatomie	Yes	Yes
847	Westar Energy, Inc. – Lawrence Energy Center	Douglas	Yes	Yes
322	Westar Energy, Inc. – Tecumseh Energy Center	Shawnee	Yes	Yes

IV. Kansas Permitting Program

This section describes the KDHE BWM solid waste permit program including a more detailed review of applicable laws and regulations, key components of every CCR permit, the permit review and issuance process, the public participation process, the annual permit renewal process, and post-closure responsibilities.

As already mentioned, EPA approval of the Kansas CCR permitting program will allow for the official transition of affected Kansas CCR units from a "self-implementing" program to a program with comprehensive state oversight, including the review and approval of all relevant permit documents, regular compliance assessments of CCR management activities, and public participation as appropriate. This official recognition of the Kansas permitting program would confirm the adequacy of the program with respect to all applicable federal laws and regulations. However, regardless of whether EPA officially approves of the Kansas application, KDHE will continue to administer the state permitting program as directed by relevant state laws. To avoid regulatory conflicts and confusion, approval of the state permitting program is needed.

Applicable Laws and Regulations

In addition to the specific Kansas CCR standards that will become a condition of every permit, Kansas has other general laws and regulations that already apply to all solid waste processing and disposal facilities, including CCR landfills and surface impoundments. Some of these requirements which are listed below and included in Appendix C are more stringent or broader in scope than 40 CFR 257 Subpart D (indicated by an asterisk.):

- K.S.A. 65-3407, contains permitting requirements including: background investigations of permit applicants*; permit fees*; plans and data; permit conditions*; financial assurance*; liability insurance*; requirements for transferring permits; location restrictions*; zoning certification*; and proof of land ownership*;

- K.A.R. 28-29-6, requires permits for solid waste disposal areas and processing facilities*;
- K.A.R. 28-29-6a, requires public participation for new permits and major modifications to permits*;
- K.A.R. 28-29-7 through 28-29-10, address conditions, modification, suspension, denial, and revocation of permits*;
- K.A.R. 28-29-12, requires permitted facilities to have a closure plan and, where wastes remain on-site, to have a post-closure care plan and conduct post-closure care of the site for at least 30 years;
- K.A.R. 28-29-16, gives KDHE the authority to conduct inspections;
- K.A.R. 28-29-19, gives KDHE the authority to require environmental monitoring;
- K.A.R. 28-29-20, gives KDHE the authority to require a restrictive covenant and/or easement*;
- K.A.R. 28-29-20a, which requires monitoring analyses to be conducted by a KDHE-certified laboratory*;
- K.A.R. 28-29-23, addresses methods of disposal and processing, planning and design, location restrictions, access roads*, recordkeeping and reports*, air quality, facility communications*, fire protection*, access control*, signage*, safety program*, disease vector control*, odor and particulate control, gas control, water pollution, maps, disposal of hazardous waste, and adoption of 40 CFR 257.3-5 and 257.3-6;
- K.A.R. 28-29-25(b), requires plans and specifications for solid waste disposal areas and processing facilities not otherwise provided for in the solid waste regulations;
- K.A.R. 28-29-84, sets permit fees*;
- K.A.R. 28-29-2101 to 2201, establishes requirement for financial assurance for permitted solid waste disposal areas and process facilities.

Additional KDHE BWM policies establish other requirements and interpretations of law and regulations including: (1) BWM Policy 05-01, which requires applicants for new solid waste landfills and significant modifications of an existing solid waste landfill to notify the following agencies*: Kansas Biological Survey; Kansas Corporation Commission; KDA-Division of Water Resources; Kansas Department of Wildlife, Parks and Tourism; Kansas Geological Survey; KDA-State Conservation Commission; Kansas State Historical Society; Kansas Water Office; U.S. Army Corps of Engineers; and U.S. Fish and Wildlife Service; (2) BWM Policy 2014-P1, which addresses post-closure permit renewal and financial assurance; and (3) BWM Policy 98-05 which addresses public participation as related to all permitted solid waste facilities. All referenced BWM policies are attached as Appendix D.

All of the regulations and policies listed above establish solid waste requirements that will be addressed by the KDHE Bureau of Waste Management; however, certain other requirements will be regulated under or in coordination with other KDHE regulatory programs. These include:

- Title V Air Quality permits issued by the KDHE Bureau of Air (BOA) that address dust control measures at coal-fired power plants. The fugitive dust control requirements of 40 CFR 257.80 will be addressed in the BWM solid waste permit in coordination with BOA.

- The requirements of 40 CFR 257.82(b) concerning the outflow of surface impoundments, will be regulated by the KDHE Bureau of Water under NPDES permits. BOW will also

issue NPDES construction storm water permits for any construction sites of one acre or more.

Key Components of Proposed CCR Permits

Every CCR permit will consists of several key components including, but not limited to, the following:

- A cover page which includes company name, legal description or area, area in acres, engineering and surveyor seals, and signatures.
- General permit conditions
- Special permit conditions
- Engineering design plans and survey documents
- Facility operating plan
- Construction quality assurance plan
- Restrictive covenant related to land use
- Groundwater monitoring plan
- Closure/post-closure plan
- Financial assurance documentation
- CCR standards

Review and Permit Issuance Process including Public Participation

Upon receipt of an application to construct a new solid waste disposal or processing area or to modify an existing permitted facility, KDHE BWM will initiate the review process specified in state law (K.S.A. 65-3407). The review is carried out by various staff including engineers, geologists, a financial assurance auditor, and program managers.

Any new CCR permits and significant modifications of CCR permits are subject to the public participation process set forth in K.A.R. 28-29-6a in accordance with Bureau of Waste Management Policy 98-05 which provides interpretative guidance on the applicability of the public participation process to industrial landfills and solid waste processing facilities. A public notice of the permit is posted in the *Kansas Register* and in a local newspaper establishing a 30-day public comment period and, if there is sufficient public interest, a public hearing is held. KDHE's response to comments is made available to the public when the final decision is made regarding the issuance of the permit. Two examples of a significant modification of a CCR facility would be: 1) the addition of a new CCR unit at a permitted facility; and 2) the lateral expansion of an existing unit into an adjacent, but previously unpermitted area. All permits covering affected CCR units have been through the public participation process at least one time.

The modification of the CCR permits to incorporate the CCR standards as a new special permit condition will follow the public participation process including public notice and a comment period.

Public participation will also be an integral part of all major permit decisions through the life of all permitted CCR disposal and processing facilities. KDHE has built public participation processes into many sections of the Kansas CCR standards to address various department

decisions to approve of alternatives to the default provisions of the regulations. Consideration of alternative designs, operational practices, or corrective measures will be based upon information provided by permittees including technical demonstrations made by permittees that proposals are equally protective.

Annual Review and Permit Renewal – Life of Solid Waste Permits

Every solid waste disposal or processing facility permit, including all existing CCR permits, must be renewed annually in accordance with K.A.R. 28-29-84. Kansas solid waste permits do not expire nor do any permit conditions change at the time of renewal. The renewal process is carried out to collect an annual permit fee, to update closure/post-closure responsibilities, and to confirm that the permittee has adequate insurance and financial assurance to cover the updated closure/post-closure costs. There is no public participation process associated with the annual permit renewal process unless other changes to design or operations are also being implemented. Ongoing KDHE inspections, document reviews, and other assessments take place at every permitted solid waste facility to ensure complete compliance with all applicable laws and regulations. The annual assessment of closure/post-closure costs and the availability of adequate financial assurance is a good example of the high degree of state review of the current conditions at the site and the need for permittee (or third party) action to manage and control risks associated with CCR management in the short-term as well as through the required post-closure period (see below).

Post-Closure Responsibilities

Kansas state law (K.S.A. 65-3406(a)(18)) requires every owner of a permitted solid waste disposal area to be responsible for the long-term care of the site for a minimum of 30 years after closure. The Secretary of KDHE has the authority to extend the post-closure period as necessary to protect public health or the environment. While the post-closure period cannot be less than 30 years after the final disposal of waste into the unit, the proposed Kansas CCR standards do allow KDHE to reduce some post-closure care activities if adequate technical justification is provided to support a change without increasing risks to public health or the environment. Any such changes would be subject to the public participation process.

Prior Industry Actions Under Self-Implementing CCR Regulations

KDHE recognizes that the owners or operators of each affected CCR unit has carried out many actions in response to the self-implementing CCR regulations over the past two to three years. KDHE has monitored those actions and provided some feedback to facilities in certain areas as related to responsibilities under state solid waste permits. However, not all plans and documents have been reviewed and approved as will be required after KDHE is approved by EPA to administer the CCR program. KDHE's CCR standards acknowledge and accept all prior work performed by and/or certified by a licensed professional engineer; however, all such prior efforts are subject to future review and possible comments by KDHE staff.

Review and Approval of Routinely Submitted Documents

The Kansas CCR standards specify that various documents, reports, and plans which may not directly relate to a permit modifications must be submitted to KDHE for review and, in some cases, approval. Examples include groundwater monitoring reports, construction quality assurance reports, fugitive dust controls reports, and periodic safety factor assessments. Not all submittals require an official approval by KDHE.

V. Compliance Monitoring and Enforcement

An important component of the Kansas CCR permitting program relates to compliance monitoring and enforcement of all applicable laws, regulations, standards, and permit conditions. Within KDHE, compliance monitoring is a routine duty of various staff members including waste program inspectors, permit engineers, hydrogeologists overseeing groundwater monitoring programs, compliance officers, and even administrative staff responsible for fee collection and the processing of various required reports.

Failure to conform to any requirements will lead to a series of progressive enforcement actions all designed to ensure a return to compliance. Depending upon the severity of a noted violation, staff may simply notify a facility of a minor violation with a directive to implement a corrective measure; however, serious violations may result in the prompt referral of a case to enforcement staff that utilize a wide range of mechanisms to return a facility to compliance including letters of warning, administrative orders, and consent agreements. Permit suspension or revocation is also possible along with penalties assessed for noted violations.

Internal Enforcement procedures

Most violations of law, regulations, and permit conditions are identified during routine facility inspections carried out one or more times per year (see Appendix H for a "Generic CCR Inspection Checklist" for both landfills and surface impoundments, which is based on the existing Federal CCR regulations). Depending upon the nature and severity of any noted violations, inspectors will direct facilities to correct problems within an established timeframe. Failure to complete required corrective measures within such timeframes will lead to either a compliance period extension, a letter of warning, or referral of the case to the Compliance and Enforcement Unit of BWM to determine an approach and specific course of action regarding enforcement measures to be utilized. The BWM Penalty Assessment Team will examine each referred case from inspection staff, KDHE district offices, and other parties with BWM, such as the Solid Waste Permits Section, to determine how to proceed including the calculation of penalties when appropriate. Referred cases are reviewed with the BWM Director to receive concurrence before forwarding cases for final action by the Director of the KDHE Division of Environment (DOE). The DOE Director has statutory authority to sign administrative orders that include penalties for non-compliance. The addition of certain types of corrective measures to administrative orders or settlement options, such as the inclusion of Supplemental Enforcement Projects in lieu of penalties, may require that cases be elevated to the Secretary of KDHE who will sign such orders and consent agreements.

Determination of Penalties for Non-Compliance

Authority to assess monetary penalties of up to $5,000 per day for each unlawful act (defined in K.S.A. 65-3409), which includes violations of any permit condition, is established in K.S.A. 65-3419. To ensure consistency, the Penalty Assessment Team utilizes the BWM Solid Waste Penalty Matrix (copy attached as Appendix E), which is periodically updated to calculate penalty amounts for each type of violation. The matrix is designed to include consideration of severity, actual impact to public health and the environment, and financial benefit gained through non-compliance.

Enforcement Authority

Kansas verifies the accuracy of information submitted by owners or operators of CCR units by conducting unannounced site inspections, as provided by K.A.R. 28-29-16, to verify that a site is conforming to the conditions of the permit issued by the state. Kansas verifies the adequacy of sampling methods used by owners or operators by: review and approval of site specific sampling and analysis plans; requiring that owners/operators use a laboratory certified by the state to perform the specific analysis, as specified in K.A.R. 28-29-20a; review of analytical laboratory reports; collection of duplicate (i.e., split samples) to confirm the analytical test results; and observation of the groundwater collection by the site personnel.

Kansas' inspection and enforcement staff follow the Bureau of Waste Management's Basic Inspector Training Program and Standard Operating Procedures in the Quality Management Plan to produce evidence that is admissible in court.

Complaints received from the public are entered in the KDHE Environmental Complaint Tracker Databased, which helps ensure that complaints are referred to the appropriate program and investigated in a timely manner.

The authority to restrain immediately and effectively any person by administrative or court order or by suit in a court of competent jurisdiction from engaging in any activity which may endanger or cause damage to human health or the environment is provided by K.S.A. 65-3411 and 65-3419.

The authority to sue in a court of competent jurisdiction to enjoin any threatened or continuing activity which violates any statute, regulation, order, or permit which is part of or issued pursuant to the State program is provided by K.S.A. 65-3419(e).

The authority to sue in a court of competent jurisdiction to recover civil penalties for violations of a statute or regulation which is part of the State program or of an order or permit which is issued pursuant to the State program is provided by K.S.A. 65-3419(a) and (e).

The authority that allows intervention, as a right, any person who has an interest which is or may be adversely affected may intervene in civil enforcement actions as stated in K.S.A. 60-224 (Kansas Civil Rules of Procedure).

VI. Kansas Regulatory Program Resources and Qualifications

The KDHE regulatory program that will oversee the CCR permitting program and all other solid waste program responsibilities consists of 45 technical or managerial staff members including engineers, geologists, scientists, inspectors, data managers, attorneys, and program managers. Appendix F provides an organizational chart showing the numbers of each position type assigned to solid waste permitting, compliance & enforcement, data management & reporting, and district office inspections.

The actual number of staff resources working on CCR issues at any given time will vary based upon needs. The KDHE staff who work on CCR facilities are also assigned to other solid waste regulatory oversight duties.

All technical staff assigned to CCR and other solid waste facilities have demonstrated educational credentials, professional licensing as appropriate, and job-specific training to ensure adequate qualifications to oversee the state regulatory program. For example, all new permit engineers undergo landfill design and operation training at the nationally renowned training course administered by the University of Wisconsin. All inspectors and enforcement officers complete a thorough inspectors training program and when complete are designated as "certified waste inspectors" by the BWM assessment team. All staff receive other ongoing training to maintain a high level of technical competence regarding relevant technologies and applicable regulations.

Funding to administer the state Solid Waste Program, including the CCR permitting program is received by KDHE through a landfill tonnage fee ($1 per ton for most solid wastes, but not for CCR) and permit fees (new applications and annual renewals). No state general funds are used to support Solid Waste Program expenses. These funding sources are stable and they are dedicated to solid waste program expenses only. Adequate revenue is generated annually to fully support all program administrative expenses presently and into the foreseeable future.

VII. Public Disclosure of CCR Documents

The Kansas Open Records Act (KORA) is the state equivalent of the federal Freedom of Information Act. In accordance with KORA, KDHE provides records to the general public and all interested persons regarding permitted facilities, inspections, completed enforcement actions, and other documents that are in our state files. The KORA process complements the public participation provisions and policies of KDHE regarding permit actions and major regulatory decisions as well as the requirement maintained in the Kansas CCR standards for facilities to post certain CCR documents on public websites.

VIII. Technical and Legal Basis for State Regulatory Flexibilities

This section provides the legal and technical basis of support for the proposed regulatory flexibility provided in the Kansas CCR standards.

A. Legal Basis of Support for Kansas CCR Permit Program

1. Introduction.

The proposed Kansas CCR permitting program conforms to applicable federal law and therefore is legally defensible. KDHE has taken all necessary steps in the preparation of thorough CCR standards and the incorporation of those standards into each CCR permit. KDHE has the technical expertise and legal authority to implement its own CCR program in Kansas and therefore respectfully requests that EPA approve the State of Kansas' application to administer the CCR permitting program.

2. Standard of review.

To propose approval, EPA must determine that the Kansas program requires each CCR unit located in the state to achieve compliance either with the requirements of 40 CFR Part 257, Subpart D, or with state criteria that EPA determines (after consultation with the State) to be at least as protective as the requirements of 40 CFR Part 257, Subpart D. *See* 42 U.S.C. § 6945(d)(1)(B). EPA may approve a proposed state permit program in whole or in part. *Id.*

According to EPA, delegation requests will be denied only when a state or local agency "clearly lacks the legal authority or technical capability for program assumption." *See* U.S. Envtl. Prot. Agency, EPA Policy Concerning Delegation to State and Local Governments (1985) ("Delegation Policy). That criterion, stated clearly in EPA's published policy, dictates that EPA should only reject Kansas's CCR permit program delegation application if Kansas clearly lacks either the legal authority or the technical capability to administer a CCR permitting program within the state. The "as protective as" standard would seemingly fit into the "technical capability" prong of EPA's criterion, which will be addressed below. This application demonstrates that KDHE has both the legal authority and the technical capability to regulate CCRs in Kansas.

When federal environmental agencies, as in the case of EPA's CCR permitting program, contemplate state program delegation or approval, the assumption and default is that state programs will be delegated upon proving the requisite technical expertise and legal authority. As such, when EPA denies delegation, it is tasked with demonstrating how a state has failed to meet this standard.

3. Federal CCR Rule and the WIIN Act

On April 17, 2015, the EPA published a final rule addressing the disposal of CCRs, which the Agency decided to regulate pursuant to Subtitle D. *See* Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302-01 (April 17, 2015) ("2015 Rule"). This original rule was written to be self-implementing. To that effect, the standards and criteria established in the rule were uniform and conservative in nature so that all scenarios and conditions of risk are adequately addressed at CCR facilities nationwide. The lack of state or federal regulatory oversight provided a reasonable basis for limited regulatory flexibility in the 2015 Rule.

On December 16, 2016, President Obama signed the Water Infrastructure for Improvements to the Nation (WIIN) Act into law. Section 2301 of the WIIN Act authorized EPA-approved state permitting programs to regulate coal ash disposal. This legislation was necessary to allow states and the federal government to directly enforce the regulations. Pursuant to the WIIN Act, states may develop and operate their own permitting programs that adhere to, or are at least as protective as, EPA's promulgated standards in the final rule. EPA is required to regulate coal ash disposal in states that choose not to implement permitting programs or that have inadequate programs.

To become approved, the statute requires that a state provide "evidence of a permit program or other system of prior approval and conditions under State law for regulation by the State of coal combustion residuals units that are located in the State." 42 U.S.C. § 6945(d)(1)(A). In addition, the statute directs that each coal combustion residuals unit located in the State is required to achieve compliance with either: (1) The Federal CCR requirements in 40 CFR part 257, subpart D; or (2) other State criteria that the Administrator, after consultation with the State, determines to be at least as protective as the Federal requirements. *See* 42 U.S.C. § 6945(d)(1)(B)(i−ii). EPA has 180 days from receiving a complete application to make a final determination and must provide public notice and an opportunity for public comment. *See id*.

"RCRA section 4005(d)(1)(A) does not require EPA to promulgate regulations for determining the adequacy of State programs. EPA is therefore relying in large measure on the existing regulations in 40 CFR part 239, Requirements for State Permit Program Determination of Adequacy, on the statutory requirements for public participation in RCRA Section 7004, and on the Agency's experience in reviewing and approving State programs in general." Oklahoma: Approval of State Coal Combustion Residuals State Permit Program, 83 Fed. Reg. 2100-01 (Jan. 16, 2018) (EPA's notice of proposal to approve the application submitted by the Oklahoma Department of Environmental Quality).

EPA is required to evaluate two components of a state program to determine whether it meets the standard for approval:

(1) EPA is to evaluate the adequacy of the permit program (or other system of prior approval and conditions) itself. *See* 42 U.S.C. § 6945(d)(1)(A).

(2) EPA is to evaluate the adequacy of the technical criteria that will be included in each permit, to determine whether they are the same as the federal criteria, or to the extent they differ, whether the modified criteria are "at least as protective as" the federal requirements. *See* 42 U.S.C. § 6945(d)(1)(B).

If the State shows it meets both components, then EPA should approve the program. *See* 42 U.S.C. § 6945(d)(1).

4. State Program Approval

RCRA is an exercise in cooperative federalism. Congress initially required EPA to promulgate regulations governing the treatment of hazardous waste from cradle to grave. *See* 42 U.S.C. § 6921. EPA complied with the congressional order in 1980 and promulgated what became a federal regulatory floor. *See, e.g.*, 40 C.F.R. pts. 260–72. Under 42 U.S.C. § 6926(b), however, states could assume primary responsibility for RCRA enforcement by developing their own programs, which EPA would approve after a review to assure that the state program provided for a level of regulation at least as high as the federal floor. *See* 40 C.F.R. § 271. RCRA expressly allowed states to impose regulations more stringent than those outlined in the federal floor. *See* 42 U.S.C. § 6929. 42 U.S.C. § 6928(a) gave EPA the power to enforce the substance of an approved state's program against private parties in that state.

42 U.S.C. § 6929 imposed a duty upon approved states to maintain their RCRA programs at a level at least as stringent as the federal floor. Because EPA often amended the regulatory scheme governing the treatment, storage, and disposal of hazardous wastes, approved states also had to enact conforming amendments. 40 C.F.R. § 271.216 provided a procedure governing EPA scrutiny of state program amendments. This process required the state to submit its proposed alterations to EPA; EPA then approved or disapproved of the amendments depending on whether they maintained a level of regulation at least as high as the federal floor. 40 C.F.R. § 271.21(a)-(b). *See, e.g.*, United States v. Marine Shale Processors, 81 F.3d 1361, 1367 (5th Cir. 1996).

Consistent with the spirit of cooperative federalism, the purpose of delegated state programs is to allow state agencies to implement programs with discretion. Federal environmental programs were designed by Congress to be administered at the state and local levels wherever possible. The clear intent of this design is to use the strengths of federal, state, and local governments in a partnership to protect public health and the nation’s air, water, and land.

State and local governments are expected to assume primary responsibility for implementation of national programs. KDHE recognizes that a reasonable amount of consistency across states is essential to ensure that national objectives are met. But it is clear from EPA’s delegation policy that it is not a prerequisite for all states to administer their programs identically for delegation to be granted. Through the Delegation Policy, EPA has stated that the Agency does not expect states “to adopt the same manner of administering a program that EPA itself would choose.”

It is incumbent upon federal and state agencies to distribute authority appropriately. The Delegation Policy states that “with continuing advances in state and local capabilities to administer expanding environmental programs, it is less and less appropriate for EPA to continue to directly carry out day to day operations which overlap state and local activities.”

5. Legal Analysis of “as protective as” Standard.

The language of amended Section 4005 of the Solid Waste Disposal Act (42 U.S.C. § 6945) allows a State to include technical standards for individual permits or conditions of approval that differ from the criteria under 40 C.F.R. Part 257 (or successor regulations promulgated pursuant

to sections 1008(a)(3) and 4004(a)) if, based on site-specific conditions, the Administrator determines that the technical standards established pursuant to a State permit program or other system are at least as protective as the criteria under that Part.

EPA guidance also states that state programs do not have to be identical to the current CCR rule, found in 40 C.F.R. Part 257 Subpart D, but must be at least "as protective as" the CCR rule. *Permit Programs for Coal Combustion Residual Disposal Units*, EPA https://www.epa.gov/coalash/permit-programs-coal-combustion-residual-disposal-units (last updated Jan. 4, 2018).

Unlike "legally defensible," "as protective as" is a technical standard, not a legal one. Whether a state CCR permit condition or technical standard is "as protective as" a corresponding federal CCR permit condition or technical standard, is a scientific question about providing the same level of protection to the environment and human health. This is based on a plethora of risk factors such as state-specific geology, hydrology, precipitation, proximity to receptors, and CCR unit design and operation.

Section 2301 of the WIIN Act was drafted to create a practical and reasonable mechanism for states to develop and implement individualized CCR programs. It would be inconsistent with the intent of the WIIN Act, which encourages states to develop state-specific programs based on state geology, hydrology, and other technical factors and conditions, for the Administrator to then deny delegation or withhold approval when a state requests such state-specific flexibility, stating that it fails the federal "as protective as" standard.

EPA's guidance on obtaining federal delegation recommends that states include EPA in the process of creating a state CCR program. Kansas has fulfilled this guideline by having several conference calls and consultations with EPA regarding potential Kansas CCR standards and permit conditions. KDHE is prepared to address any EPA questions or comments regarding proposed areas of state-specific flexibility. EPA has thus far offered legal comments regarding certain alternative technical standards proposed by KDHE; however, scientific concerns or regulatory shortcomings have not been identified, particularly as related to KDHE's ability to competently assess risks and make regulatory decisions based upon all relevant facts. This avoids assessing the true protectiveness of the proposed state permitting program system and the decision-making processes built into the system.

6. Justification of Why Areas of Flexibility Meet the "as protective as" Standard

Federal CCR Statutes do not require state regulations to be in place as a prerequisite for program approval. Permits are enforceable per the EPA guidance document. Kansas statutes afford KDHE the authority to enforce waste management standards as well as solid waste permits. Kansas has full statutory authority to implement a CCR permitting program within our state.

As previously mentioned, KDHE expects technical questions and comments related to the proposed Kansas CCR standards and areas of regulatory flexibility. The technical justification section which follows explains why each proposed alternative standard is "as protective as" the federal CCR regulations. As written, many of the federal standards regulating CCR under the

2015 Rule may be more stringent than necessary to be "protective" based upon conditions in Kansas. Certain federal standards require actions, practices, and operations that may require high expenditures and natural resource impacts while adding no discernible benefit regarding the protection of public health or the environment in Kansas. With Kansas delegation, KDHE will be able to make reasoned decisions to maximize benefits and minimize unnecessary use of limited resources. By approving of the Kansas program, EPA will be agreeing that a competent state regulatory program should have discretion to make technical risk-based decisions that ensure that "as protective as" measures and practices are followed at all CCR facilities. This type of deference to state programs is exactly what was contemplated by the delegation process.

The consideration of whether any EPA action, including delegation, is legally defensible is correctly predicated on the arbitrary and capricious standard of review, which is "highly deferential and presumes the validity of agency action," Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. Ruckelshaus, 719 F.2d 1159, 1164 (D.C. Cir. 1983).

Further, challenges to EPA's delegation of the Kansas CCR permitting program would not result in a court usurping EPA's technical expertise used in making such a determination. The courts would likely analyze whether EPA had followed the prescribed process as mandated by law and decided, after consideration of all relevant details, rendering its decision nonarbitrary. "We note that the district court itself should not conduct such a comparison. Under our UMW decision, the district court should determine only whether the agency has adequately explained its compliance with the standard at issue; it may not 'substitute its own judgment on the comparative protectiveness of the old and new regulations for that of the Secretary.' " See Gray Panthers Advocacy Comm. v. Sullivan, 936 F.2d 1284, 1290 (D.C. Cir. 1991); *See also* Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). "The absence of an explanation puts the reviewing court in the position of having to substitute its own judgment on the comparative protectiveness of old and new regulations for that of the Secretary, and this we cannot do." United Mine Workers of Am., Int'l Union v. Dole, 870 F.2d 662, 667 (D.C. Cir. 1989).

If KDHE, based upon its extensive experience and technical expertise, decides that certain standards are appropriate and suitable to protect human health and the environment in Kansas, and EPA in its technical oversight, agrees with those determinations, the Courts have no purpose in undermining those technical decisions.

This application meets the standard for approval in RCRA section 4005(d)(1)(B)(i), as it will require each CCR unit located in Kansas to achieve compliance with the applicable criteria for CCR units under 40 C.F.R. Part 257. To make this preliminary determination, KDHE has compared its proposed CCR permit program to 40 C.F.R. Part 257 to determine whether the differences from the federal requirements meet the standard for approval in RCRA Section 4005(d)(1)(B)(ii) and (C).

The Attorney Statement/Legal Certification as required by EPA guidance document is attached as Appendix G.

B. Technical Basis of Support for Regulatory Flexibility

As explained above, the WIIN Act *"allows a State to include technical standards for individual permits or conditions of approval that differ from the criteria under part 257 . . .* (provided) *that the technical standards established pursuant to a State permit program . . . are at least as protective as the criteria under that part."* In accordance with this clear expression of Congressional intent, KDHE developed state standards that allow for the consideration of the specific conditions at CCR sites in Kansas while ensuring that there will be no adverse effects on the protection of public health and the environment. In addition, the Kansas standards were designed recognizing the capabilities of competent state regulatory staff to evaluate proposals and demonstrations made by the regulated community to seek alternatives to the prescriptive self-implementing requirements set forth in the federal CCR regulations. The state standards do not automatically apply regulatory alternatives based upon established criteria. This would effectively retain "self-implementing" provisions that provide alternatives standards. Rather, permittees must submit requests to KDHE which propose alternatives to the CCR standards, including demonstrations that no realistic added risks to public health or the environment would occur if an alternative approach is approved. KDHE will review any such request and determine whether the proposed alternative is adequately protective.

All proposed flexibilities to the federal CCR regulations that are included in the Kansas CCR standards (KCS) are listed below along with the technical justification that explains the reason(s) that the alternative standard is equally protective:

Flexibility 1 – Qualified groundwater scientist. KCS 257.60(b) and 257.90 through 98.
In specific locations where 40 CFR 257 Subpart D uses the term "qualified professional engineer," the Kansas CCR Standards use the term "qualified groundwater scientist." This flexibility will allow licensed geologists to make groundwater-related certifications, including placement above the uppermost aquifer, groundwater monitoring, and remediation of releases.
Technical Justification 1.
In Kansas, both professional engineers and licensed geologists are licensed by the Kansas State Board of Technical Professions. A licensed geologist who meets the Kansas definition of a "qualified groundwater scientist" is just as qualified to perform groundwater-related tasks as a person who meets the federal definition of a "qualified professional engineer." See definitions in KAR 28-29-3.

Flexibility 2 – Waiver to design criteria. KCS 28-29-721.
KCS 28-29-721 will allow the owner or operator of a proposed new CCR landfill or proposed lateral expansion of a CCR landfill to submit a request to the Kansas Department of Health and Environment (KDHE) for a waiver to one or more of the liner and leachate collection system requirements in KCS 257.70. The waiver may be granted by the Secretary if the proposed alternative design is demonstrated to be at least as protective of public health and safety and the environment as the liner and leachate collection system requirements of KCS 257.70.

Technical Justification 2.
There are conditions where the federal requirements are overly prescriptive. For example, there are landfills in western Kansas that do not need this level of protection due to factors that

include: annual average precipitation, depth to groundwater, distance to receptors. The reduced amount of precipitation, increased depth to groundwater, and sparse population in western Kansas make it unlikely that a release from a CCR unit would encounter groundwater or impact other potential receptors. For example, there may be no leachate generation due to the hydrophilic and pozzolanic nature of the CCR.

The proposed alternative design and the supporting documents will be reviewed by KDHE professional engineers and/or licensed geologists. The waiver will only be granted, after public notice of the waiver request, if the technical evaluation by KDHE staff confirms that the proposed design does not increase the risk to public health and safety and the environment and is as protective as the design criteria in KCS 257.70.

Flexibility 3 – Woody vegetation/vegetative height. KCS 257.73(a)(4) and 257.74(a)(4).
The flexibility in KCS 257.73(a)(4)(ii)(D) and (E) and 257.74(a)(4)(ii)(D) and (E) will allow the owner or operator of a CCR unit to practically evaluate when it necessary to remove woody vegetation and/or mow the slopes. The changes in the regulations will maintain the performance standard, while eliminating unnecessarily prescriptive language and the prescriptive height for vegetation.

Technical Justification 3.
KDHE will rely on the performance standard in 257.73(a)(4)(ii)(C) and 257.74(a)(4)(ii)(C) to ensure adequate observation of and access to slopes and pertinent surrounding areas. Mowing at least once per year, in accordance with 257.73(a)(4)(ii)(E) and 257.74(a)(4)(ii)(E), will inhibit the growth of woody vegetation.

Flexibility 4 - Alternative inspection schedules. KCS 28-29-731.
KCS 28-29-731 will allow the owner or operator of any CCR unit to submit a request to KDHE to use an alternative inspection schedule for one or more of the CCR surface impoundment inspections in KCS 257.83(a)(1)(i) or (ii), or the CCR landfill inspections in KCS 257.84(a)(1)(i). The waiver may be granted by the Secretary if the proposed alternative inspection meets certain conditions, which include, for a CCR surface impoundment, that the impoundment must either be an incised surface impoundment or a low hazard potential CCR surface impoundment as defined under “Hazardous potential classification” in KCS 257.53.

Technical Justification 4.
The risk or potential risk to human health or safety or the environment is a function of site-specific design, geology, depth to groundwater, distance from receptors, and operational factors. The risk or potential risk is limited under normal operational conditions, and the risk is further reduced at CCR surface impoundments with a low hazard potential classification. The additional requirement that the CCR unit must not have had any deficiencies or concerns identified because of the previous year’s annual inspection further reduces the risk or potential risk to human health and safety and the environment. Therefore, the need for inspections is less frequent except for a period of time after an exceedance of the 25-year, 24-hour storm event or after detection of deficiencies or concerns.

Flexibility 5 - Waste boundary monitoring well location. KCS 28-29-742.
KCS 28-29-742 will allow for the installation of a boundary monitoring well at the closest practical distance from the waste boundary in the event a well cannot be installed at the waste boundary.

Technical Justification 5.
The preamble in the 2015 Rule, 80 FR 21400, states "Downgradient wells to monitor for any contaminants leaking into the groundwater must be located at the hydraulically downgradient perimeter (i.e., the edge) of the CCR unit or at the closest practical distance from this location."

It may not always be feasible to install a downgradient well at the waste boundary of the CCR unit due to the location of the waste boundary or planned future activities. For example, the well should not:
1. Be installed in a location that may cause structural instability of the CCR unit;
2. Be installed in a location that is physical dangerous to access; or
3. Need to be decommissioned within five years of installation due to construction of an adjacent CCR unit.

KDHE professional engineers and/or licensed geologists will evaluate the proper placement of downgradient groundwater monitoring well locations to ensure that the groundwater monitoring system yields analytical results that are representative of groundwater quality.

Flexibility 6 – Detection monitoring; demonstration of alternative source or error. KCS 257.94(e)(2).
KCS 257.94(e)(2) requires that KDHE review the demonstration of alternative source or error. The owner or operator has 90 days after finding a statistically significant increase over background to submit the demonstration to the department. As a result, the combined times for the demonstration and evaluation by the Secretary may result in a period of more than the 90 days specified in the federal regulations to confirm that the initial data accurately represents groundwater quality or to identify the source of the increased contaminant concentrations (e.g., errors in sampling, analysis, or statistical evaluation; natural variation in groundwater quality; or a source other than the CCR unit).

Technical Justification 6.
The KDHE review required by KCS 257.94(e)(2) will ensure that the owner or operator of the CCR unit accurately assesses groundwater quality and identifies the cause of the statistically significant increase in background levels. This will determine whether it is necessary for a CCR unit to initiate an assessment monitoring program.

KDHE professional engineers and licensed geologists have the technical expertise to evaluate the demonstration. Even though the total time for the demonstration and KDHE evaluation may take longer than 90 days, the technical review by KDHE will add an extra level protection to public health and safety and the environment, which outweighs any negative impact from exceeding the 90-day period specified in the federal regulations.

Flexibility 7 – Assessment monitoring; demonstration of alt. source or error. KCS 257.95(g)(3)(ii) & (g)(4).

KCS 257.95(g)(3)(ii) requires that KDHE review the demonstration of alternate source or error. The owner or operator has 90 days after finding a statistically significant increase over background to submit the demonstration to the department. As a result, the combined times for the demonstration and evaluation by the Secretary may take longer than the 90 days specified in the federal regulations [40 CFR 257.95(g)(4)] to confirm that the initial data accurately represents groundwater quality or to identify the source of the increased contaminant concentrations (e.g., errors in sampling, analysis, or statistical evaluation; natural variation in groundwater quality; or a source other than the CCR unit).

Technical Justification 7.

The KDHE review required by 257.95(g)(3)(ii) will ensure that the owner or operator of the CCR unit accurately assesses groundwater quality and identifies the cause of the statistically significant increase in background levels. This will determine whether it is necessary for a CCR unit to initiate an assessment of corrective measures.

KDHE professional engineers and licensed geologists have the technical expertise to evaluate the demonstration. Even though the total time for the demonstration and KDHE evaluation may take longer than 90 days, the technical review by KDHE will add an extra level protection to public health and safety and the environment, which outweighs any negative impact from exceeding the 90-day period specified in the federal regulations.

Flexibility 8 – Determination that remediation is not necessary. KCS 257.97(f).

KCS 257.97(f) allows the Secretary to determine that remediation of a release of a constituent listed in appendix IV from a CCR unit is not necessary, if the contaminated groundwater is not hydraulically connected with "a potential drinking water source." This is in contrast to proposed 40 CFR 257.97(f), which requires that the contaminated groundwater is not hydraulically connected with "waters" in general.

Technical Justification 8.

If the contaminated groundwater is not hydraulically connected to a potential drinking water source (i.e., actual or potential downgradient receptors), then the request to waive the requirement to remediate the release may not present a risk to public health.

KDHE groundwater scientists have the technical knowledge to evaluate the demonstration and site conditions to ensure that lack of remediation will not increase the risk to public health and safety and the environment.

Flexibility 9a – Non-groundwater releases remediated within 180 days. KCS 28-29-745(b)&(c).

KCS 28-29-745(c) states that the time during which a corrective action plan or amendment is under review by KDHE, as required by KCS 28-29-745(b), will not count towards the 180-day timeframe specified in KCS 257.99.

Technical Justification 9a.
This technical review by KDHE will add an extra level protection to public health and safety and the environment, which outweighs any negative impact from exceeding a total of 180 days from the identification of a non-groundwater release through the remediation of the release. KDHE professional engineers and licensed geologists have the technical knowledge to evaluate each corrective action plan and site conditions to ensure that any change to the timeframe of the remediation does not increase the risk to public health and safety and the environment.

Flexibility 9b – Non-groundwater releases remediated within 180 days. KCS 28-29-745(d).
KCS 28-29-745(d) allows the Secretary to grant extensions to the 180-day timeframe if remediation is delayed due to circumstances beyond the owner or operator's control. The Secretary may impose additional requirements as a condition of granting the request.

Technical Justification 9b.
If the 180-day time frame is exceeded, the owner or operator must comply with all the requirements of KCS 257.96, 257.97, and 257.98. Some of these requirements make no sense for a situation where completion of remediation will be delayed for only a short time.

For example, a heavy rainfall may temporarily stop remediation activities. In such a case, the owner or operator of a CCR unit may request a 30-day extension to the 180-day timeframe to complete remediation activities. Without this flexibility, the facility, which has already selected and has been implementing the remedy, would be in violation of KCS 257.96(e), for not conducting a public meeting at least 30 days prior to the selection of a corrective measure remedy.

Public health and safety and the environment will be protected by imposition of additional requirements, as appropriate, as a condition of granting the request.

Flexibility 10 – Location restriction demonstrations for inactive surface impoundments. KCS 257.100(a).
KCS 257.100(a) exempts inactive surface impoundments from the location restriction demonstration requirements in KCS 257.60 through 257.64.
Technical Justification 10.
If the owner or operator of a CCR surface impoundment cannot demonstrate compliance with the location restriction requirements, the only consequence is that the owner or operator must, within six months, cease placing waste in the unit and initiate closure of the unit (KCS 257.101(b)(1)). By definition, placement of waste in an inactive surface impoundment has ceased before October 15, 2015, and the timeframes and deadlines of KCS 257.102(e), initiation of closure activities, already apply. Therefore, there is no reason for an inactive surface impoundment to perform location restriction demonstrations.

Flexibility 11 – Waiver to surface impoundment closure requirement. KCS 28-29-751.
KCS 28-29-751 allows the Secretary to grant a waiver to the required closure of an unlined CCR surface impoundment if the closure is required due to contamination or placement above the aquifer and the owner or operator can make specific demonstrations. Public notice of the request is required.

Technical Justification 11a.
The owner or operator may demonstrate that measures other than closure can protect human health and safety and the environment. The preamble to the 2015 Rule, 80 FR 21371, states: "EPA acknowledges that it may be possible at certain sites to engineer an alternative to closure of the unit that would adequately control the source of the contamination and would otherwise protect human health and the environment. However, the efficacy of those engineering solutions will necessarily be determined by individual site conditions. As previously discussed, the regulatory structure under which this rule is issued effectively limits the Agency's ability to develop the type of requirements that can be individually tailored to accommodate particular site conditions."

KDHE professional engineers and licensed geologists have the technical knowledge to evaluate the proposed protective measures and site conditions to ensure that continued operation of the unit will not increase the risk to public health and safety and the environment.

Technical Justification 11b.
The owner or operator may demonstrate that the groundwater is already contaminated and closure will not reduce risk to actual or potential receptors.

In the 3/15/2018 proposed rule, 40 CFR 257.97(f) allows the State Director to determine that remediation of a release of an appendix IV constituent is not necessary under certain conditions. [A discussion of this proposed flexibility is found in the preamble to the 3/15/2018 proposed rule, 83 FR 11600]. In cases where remediation will not reduce risk to actual or potential receptors, the owner or operator may also be able to demonstrate that closure will not reduce risk to actual or potential receptors.

KDHE professional engineers and licensed geologists have the technical knowledge to evaluate the demonstration and site conditions to ensure that continued operation of the unit will not increase the risk to public health and safety and the environment.

Technical Justification 11c.
The owner or operator may demonstrate that there is no potential for migration of hazardous constituents in appendices III and IV to a drinking water source or the uppermost aquifer.

In the 3/15/2018 proposed rule, 40 CFR 257.90(g) allows the State Director to suspend groundwater monitoring requirements if there is evidence that there is no potential for migration of hazardous constituents in appendices III and IV to the uppermost aquifer during the active life of the unit and post-closure care. In cases where groundwater monitoring is not required, the owner or operator may also be able to demonstrate that closure will not reduce risk to actual or potential receptors.

KDHE professional engineers and licensed geologists have the technical knowledge to evaluate the demonstration and site conditions to ensure that continued operation of the unit will not increase the risk to public health and safety and the environment.

Flexibility 12a – Closure by removal of CCR; alternative standards – site-specific. KCS 28-29-753(a).

KCS 28-29-753(a) allows the Secretary of KDHE to grant the request for an owner or operator to complete the closure by removal of CCR using alternative, site-specific standards that are as protective of public health and safety and the environment as background levels.

Technical Justification 12a.

In some cases, constituent levels in the CCR unit may be above background, but at a level that does not pose a risk to human health or the environment. The owner or operator of a CCR unit must provide a quantified demonstration to KDHE that constituent levels throughout the CCR unit and any areas affected areas do not exceed risk-based standards. The request and supporting demonstration documentation will be reviewed by KDHE professional engineers and/or licensed geologists. The technical review of any waiver request will assure protection of public health and safety and the environment. Public notice of the request is required.

Flexibility 12b – Closure by removal of CCR; alternative standards – Appendix III. KCS 28-29-753(b).

KCS 28-29-753(b) allows the Secretary of KDHE to grant the request for an owner or operator to base a determination that closure is complete based on Appendix III constituents if assessment monitoring has not been triggered (i.e., the unit is in detection monitoring).

Technical Justification 12b.

The owner or operator of a CCR unit that is in detection monitoring conducts groundwater sampling and analyses for the presence of Appendix III constituents. As stated in the preamble to the June 21, 2010 proposed rule, the appendix III constituents selected for detection monitoring are those that would rapidly move through the subsurface, so would provide an early detection as to whether contaminants were migrating from the disposal unit (75 FR 35206). Therefore, if groundwater concentrations do not indicate a statistically significant increase above background for any constituent in Appendix III, there is no reason to suspect that the groundwater is contaminated, and it is not necessary to analyze the groundwater for Appendix IV constituents.

In addition, as stated in Justification 12a, above, the request and supporting demonstration documentation will be reviewed by KDHE professional engineers and/or licensed geologists. The technical review of any waiver request will assure protection of public health and safety and the environment. Public notice of the request is also required.

Flexibility 13 – Alternative final cover systems. KCS 28-29-754.

KCS 28-29-754 allows the owner or operator of a CCR unit to submit a request to KDHE for a waiver to one or more of the final cover system requirements in KCS 257.102(d)(3)(ii)(A) through (C). The waiver may be granted by the Secretary if the proposed alternative design is demonstrated to be at least as protective of public health and safety and the environment as the requirements in KCS 257.102(d)(3)(ii)(A) through (C). Public notice of the request is required.

Technical Justification 13.

There are conditions where the federal requirements are overly prescriptive. For example, there are landfills in western Kansas that do not need this level of protection due to factors that

include: annual average precipitation, depth to groundwater, and distance to receptors. The reduced amount of precipitation, increased depth to groundwater, and sparse population in western Kansas make it unlikely that a release from a CCR unit would encounter groundwater or impact other potential receptors. For example, even with a cover that does not meet all of the requirements of KCS 257.102(d)(3)(ii)(A) through (C) there may be no leachate generation due to the hydrophilic and pozzolanic nature of the CCR.

The proposed alternative design and the supporting documents will be reviewed by KDHE professional engineers and/or licensed geologists. The waiver will only be granted, after public notice of the waiver request, if the technical evaluation by KDHE staff confirms that the proposed design does not increase the risk to public health and safety and the environment and is as protective as the design criteria in KCS 257.102(d)(3)(ii)(A) through (C).

Flexibility 14 – Materials allowed in units closing for cause; CCR and non-CCR waste. KCS 28-29-752(c).

KCS 28-29-752(c) allows the Secretary of KDHE to approve the placement of CCR or non-CCR waste in a CCR surface impoundment that is closing due to contamination, location above the aquifer, or the wetlands location restriction. The waste must be used as part of closure activities, but KDHE does not require the use of CCR to meet all of the requirements of proposed 40 CFR 257.102(d)(4). The owner or operator demonstrate that placement of the material will not negatively impact closure and will not increase risk or negatively impact public health or safety or the environment. Public notice of the request is required.

Technical Justification 14.

Many surface impoundments already contain such a large amount of CCR that placing a relatively small amount of additional CCR (or non-CCR waste) in the unit to bring the site to grade before construction of the final cover will not increase risk or negatively impact public health or safety or the environment.

KDHE professional engineers and licensed geologists have the technical knowledge to evaluate the demonstration and site conditions to ensure that placement of CCR or non-CCR waste in the CCR surface impoundment will not negatively impact closure and will not increase the risk to public health and safety and the environment.

Flexibility 15 – Alternative closure requirements; non-CCR wastestreams. KCS 28-29-755.

KCS 28-29-755 allows the owner or operator of a CCR unit that is required to close under the provisions of KCS 257.101(a), (b)(1), or (d) to submit a request to KDHE for approval to meet the alternative closure requirements of KCS 257.103 based on the lack of alternative disposal capacity for one or more non-CCR wastestreams.

The requirements of KCS 28-29-755 are not the same as proposed 40 CFR 257.103(b) and (d) for demonstration of no alternative capacity for non-CCR wastestreams; rather they are based on the criteria for demonstration of no alternative capacity for CCR found in both the federal regulations (80 FR 21495) and the Kansas CCR Standards. The KCS regulations do not require demonstration that the CCR unit is located in a specific North American Electric Reliability Corporation (NERC) region.

Technical Justification 15.
There is no practical reason to presume that placement of non-CCR waste in a unit would pose an increased risk to public health and safety and the environment compared to CCR. Therefore, the alternative closure criteria for CCR are also adequate for non-CCR waste. For example, the NERC region a CCR unit is located in is not relevant to protection of human health and safety and the environment.

KDHE will review the alternative closure request and supporting documentation/demonstration. Kansas adds additional requirements that are not found in proposed 40 CFR 257.103(b) and (d):

- The KDHE Secretary may grant the request only if the owner or operator demonstrates that management of non-CCR material placed in the CCR unit will not adversely affect the public health or safety or the environment; and
- KDHE must give public notice of the request.

KDHE professional engineers and licensed geologists have the technical knowledge to evaluate the demonstration and site conditions to ensure that placement of non-CCR waste in the CCR unit will not increase the risk to public health and safety and the environment.

Appendix A

Industry Letter of Agreement to
Incorporate CCR Standards into Permits

Westar Energy
Taking the environment to heart.

February 23, 2018

Bill Bider
Director
Bureau of Waste Management
Kansas Department of Health and Environment
1000 SW Jackson, Suite 320
Topeka, KS 66612-1367

Re: Utility Support of KDHE WIIN Act Application

Mr. Bider:

As representatives of Kansas Electric Generating Utilities, we are writing in support of KDHE's process for WIIN Act application to seek administration of the Federal Coal Combustion Residual (CCR) regulations. KDHE has outlined to utilities a permitting process that would allow for WIIN Act application to EPA. It is understood that each affected CCR unit operator in Kansas would have their facility permits modified to include conditions required by the Federal CCR rule with Kansas' modifications allowed under the WIIN Act. The WIIN Act specifically "*allows a State to include technical standards for individual permits or conditions of approval that differ from the criteria under part 257 . . . (provided) that the technical standards established pursuant to a State permit program . . . are at least as protective as the criteria under that part.*"

It is understood that KDHE has commenced and will continue and ultimately promulgate state regulations to incorporate its CCR standards. The process for regulation development and adoption has been estimated to take at least 18 months. Utilities support this parallel, alternate method of enforcement through permit programs to allow the state to gain administration of the CCR rule on an accelerated timeline. It is in the best interest of the utilities and state for KDHE to gain administration of the CCR program as soon as practicable.

Should you have any questions, comments or concerns, or need any additional information please contact Jared Morrison of Westar Energy by telephone at (785) 575-8273 or by email at jared.morrison@westarenergy.com

Taking the environment to heart.

Sincerely,

Jared Morrison

Jared Morrison
Director, Water and Waste Programs
Westar Energy

Paul M. Ling

Paul M. Ling
Senior Director of Compliance
Kansas City Power & Light Company

Ingrid Setzler
Director, Environmental Services
Kansas City Board of Public Utilities

Emily Vsetecka

Emily Vsetecka, P.E.
Manager, Environmental and Laboratory Services
Sunflower Electric Power Corporation

Appendix B

Model CCR Permit and Kansas CCR Standards

State of Kansas

Department of Health and Environment

Bureau of Waste Management
1000 SW Jackson, Suite 320, Topeka, Kansas 66612-1366 (785) 296-1600

PERMIT

No. xxx

For operating a processing facility or a solid waste disposal area
in accordance with the provisions of Kansas Statutes Annotated 65-3407

Permission is hereby granted

to Generating Station
(name of governmental entity, corporation, or person)

to operate a CCR Landfill and Surface Impoundments

location Section x, Township xS, Range xE/W in xxxxxx County

A ____-acre facility with ____ acres of disposal area.

In conformity with the attached general and special conditions and with all documents submitted by the permittee and approved by the Department of Health and Environment, including design plans as noted below.

This permit supersedes the permit originally issued on _____.

Plat of Survey sealed and signed by _____, Kansas-licensed Land Surveyor No. xxx, on _____.

Design Drawings sealed and signed by _____, Kansas-licensed Professional Engineer No. xxx_____ on _____.

Kansas
Department of Health and Environment

Done at Topeka, this _____ day of _____ 20_____

_____
Department of Health and Environment

_____ Generating Station

CCR Landfill and Surface Impoundments

PERMIT ___

GENERAL CONDITIONS

As used in this permit the following definitions apply, unless the context indicates otherwise.

"Department" means the Kansas Department of Health and Environment and its officers, authorized agents and employees.

"Secretary" means the secretary of the Kansas Department of Health and Environment.

"Permit" means a limited authorization issued by the secretary under the authority of Kansas Statutes Annotated (K.S.A.) 65-3406 and 65-3407 to own, construct, alter or operate an Industrial Solid Waste Landfill at the location described and pursuant to the conditions described in the application as approved by the department.

"Permittee" means any person(s) to whom this permit is issued who (a) owns, in whole or in part, constructs, alters, or operates any facility described in the permit; and/or (b) owns the land on which the facility is located. Unless the context indicates otherwise, words and phrases used in this permit shall have the meanings defined by K.S.A. 65-3402 as amended or Kansas Administrative Regulations (K.A.R.) 28-29-3 as amended.

1. This permit, along with its special and general conditions does not release the permittee from any liability, penalty, obligation or duty imposed by Kansas or federal statutes or regulations, county resolution or city ordinance except the obligation to obtain this permit.

2. This permit does not convey any property right of any sort or any exclusive privilege.

3. This permit shall not be construed as estopping or limiting any claims against the permittee for damage or injury to person(s) or property or to any waters of the state resulting from any acts, operations, or omissions of the permittee, its agents, contractors, or assignees, nor estopping or limiting any legal claim of the state against the permittee, its agents, contractors, or assignees, for damage to state property, or for any violation of the terms or conditions of this permit.

4. This permit is subject to modification by the department at the time of any scheduled renewal or: (a) whenever the modification is needed to reflect changed state or federal rules, (b) to incorporate changes in the facility operations or closure plan, (c) to make other modifications proposed by the permittee and approved by the department, (d) whenever the department determines that modification is necessary to prevent or reduce actual or potential hazard(s) to the public health or safety, or pollution or contamination of the environment or, (e) because of changed or unforeseen circumstances. The filing of a request by the permittee

for a permit modification, or the filing of a notice of anticipated noncompliance does not stay any permit condition. Approval from the department must be obtained prior to any modifications to the municipal solid waste landfill design, operational and closure plans approved with this permit or any development of new cells not detailed in those plans. Any minor modifications approved by the department are incorporated by reference.

5. This permit is transferable in accordance with K.S.A. 65-3407(i).

   When a transfer of the permit is requested, the current permittee shall maintain financial assurance as required by K.S.A. 65-3407 until the new permittee has demonstrated that it is complying with the legal requirements for financial assurance.

6. When the permittee submits a complete and timely application for renewal of this permit they may continue to conduct the permitted activity at the permitted location until the department takes final action on the permit renewal application if:

   (a) The permittee is in compliance with the terms and conditions of the permit; and
   (b) The department, through no fault of the permittee, has not taken final action on the application on or before the renewal date of the permit.

   Permits continued under this paragraph remain fully effective and enforceable.

7. The provisions of the Kansas Administrative Procedures Act, K.S.A. 77-501 et seq., shall apply in any proceeding to revoke this permit. Whenever any appeal is filed under a proceeding to revoke this permit, venue shall lie in Shawnee County, Kansas.

8. The permittee shall satisfy all of the following:

   (a) Duty to Comply. The permittee shall comply at all times with the terms and conditions of the permit, and all applicable State and Federal statutes and regulations.

   (b) Duty to Maintain. The permittee shall always properly operate and maintain all facilities, equipment, control systems, and vehicles which the permittee installs or uses to conduct the permitted activity.

   (c) Duty to Mitigate. The permittee shall remedy, and shall act with due diligence to prevent, all potential and actual adverse impacts to persons, property and the environment resulting from noncompliance with the terms and conditions of this permit. The permittee shall repair at his own expense all damages caused by such noncompliance.

(d) Duty to Provide Information. The permittee shall provide the department, within five (5) working days or other period specified in the request, any information relevant to this permit which the department may request.

(e) Continuing Duty to Inform. The permittee shall have a continuing duty to immediately report to the department any omitted or incorrect facts in the permit application. In addition, the permittee shall report in writing at least 30 days in advance any planned change in the facility or facility operations which could result in noncompliance with the permit or which could require a change in the permit.

(f) Entries and Inspections. For the purposes of inspections and protecting the public health, safety or welfare, or the environment, the permittee shall allow personnel or authorized agents of the department to enter the premises and have access to records as described in K.A.R. 28-29-16.

9. Records. All records and copies of all applications, reports, and other documents required, including the source of the solid waste disposed of at the facility, shall be kept by the permittee for the period specified pursuant to K.S.A. 65-3406 for postclosure operation and maintenance. This period shall be automatically extended for the duration of any enforcement action taken on the permit or may be extended by order of the department.

10. All unintentional, inadvertent, or accidental off-site releases of solid waste, or substances derived therefrom, except wind-blown litter, shall be verbally reported to the department within 24 hours and in writing within three (3) working days, and to all other persons to whom such releases must be reported pursuant to State and Federal laws or regulations.

11. Force Majeure.(a) An obligation for the permittee to perform according to this permit may be suspended with the written approval of the department, in the event unforeseen and uncontrollable circumstances occur which necessarily and unavoidably prevent performance of the terms of the permit. No events other than unforeseen, uncontrollable circumstances, however catastrophic, shall excuse nonperformance of the permit conditions by the permittee.

(b) In the event the permittee is rendered unable, wholly or in part, by the occurrence of unforeseen, uncontrollable circumstances to carry out any of its obligations under this permit, then that obligation of the permittee, to the extent affected by the occurrence of the uncontrollable circumstances, and also to the extent that due diligence is being used to resume performance at the earliest practical time, may be suspended during the continuance of the inability so caused, but for no longer than one year. At any time the permittee intends to assert force majeure as a basis for failure to comply with the permit conditions, the permittee shall notify the department immediately and provide documentation to justify invoking the force majeure closure.

(c) In the event the facility is damaged or destroyed due to an explosion, landslide, flood, fire, vandalism or other event for which the permittee carries insurance, the permittee shall promptly collect insurance proceeds and apply such proceeds to the correction or reconstruction of the facility or proceed to close the facility in accordance with an approved closure plan. Upon the occurrence of such an event, the permittee shall submit to the department for approval, a plan for the correction, reconstruction or closure of the facility, including the schedule, cost and proposed financing method as soon as practical after the occurrence of the event.

(d) In the event the permittee is unable to properly process, transfer or dispose of any solid waste generated within the area served by the facility because of the occurrence of unforeseen, uncontrollable circumstances, the permittee shall designate and arrange for an alternate disposal facility to which solid wastes may be diverted for disposal until the facility is able to resume management of the solid wastes at the facility.

(e) In the event that any damage to the environment occurs due to the unforeseeable, uncontrollable circumstances, the permittee shall take all action determined necessary by the department to mitigate and remediate such damage.

12. Tonnage Reports. The permittee shall submit to the department reports listing the quantities and types of all solid waste material that was handled during the reporting period. Each tonnage report shall be submitted to the department on forms provided by the department on a monthly, quarterly, or other frequency as determined by the department.

13. Personnel Training. The permittee shall instruct or give on-the-job training to personnel involved in any activity authorized by the permit, so that such instruction or on-the-job training teaches such personnel how to comply with the conditions of the permit and to carry out the authorized activity in a manner that is not hazardous to the health and safety of the personnel or to the public health, safety, or welfare, or to the environment. A written report summarizing the type of training provided, the dates the training was presented and the names and addresses of personnel receiving the instruction shall be retained in the facility operating record.

14. **This permit will become effective when the permittee signs and returns the attached certification to the department.**

15. This permit shall be renewed annually on the date of issuance. The permittee is responsible for applying for renewal of this permit at least 30 days prior to the renewal date on the face of this permit. The department has no duty to notify the permittee in advance of the renewal date. The permittee shall submit the following materials to the department to renew the permit.

(a) Proof of insurance. (K.A.R. 28-29-2201)

(b) Updated closure and postclosure cost estimates. (K.A.R. 28-29-2101)

(c) Proof of financial assurance, unless the facility is exempt. (K.A.R. 28-29-2101 through 28-29-2113)

(d) Renewal fee, unless the facility is exempt. (K.A.R. 28-29-84).

16. Failure to provide the materials required by paragraph 15 above or to complete other renewal requirements made necessary by law or rule and regulation on or before the anniversary date of the permit issuance shall result in immediate suspension of the permit. All receipt of waste shall cease at that time and may resume only when the permittee is informed by the department that the renewal requirements have been properly completed. If the material is not submitted at least thirty days before the anniversary date of the permit, the submission will not be considered timely, and the facility may be required to temporarily cease operations until the permit renewal is received.

17. The operations phase of this permit shall expire upon the occurrence of:

(a) The receipt of written department approval of site closure in accordance with the site closure plan; or

(b) The end of the active life of the permit whether caused by an order from the department, or the district court, or a permanent, voluntary cessation of the receipt of waste.

18. The postclosure phase of this permit shall begin immediately upon the closure of the landfill pursuant to paragraph 17 above and will be in effect for a minimum of thirty (30) years, unless extended by the secretary pursuant to K.A.R. 28-29-12(e)

_____ Generating Station

CCR Landfill and CCR Surface Impoundments

PERMIT ___

SPECIAL CONDITIONS

1) The Kansas Coal Combustion Residuals (CCR) Standards are hereby incorporated into this permit. The effective date for these standards shall be the date that the United States Environmental Protection Agency (EPA) approves of the Kansas CCR permitting program. Until that date, the owners or operators of affected CCR units shall comply with the federal CCR standards (United States Code of Federal Regulations (CFR), Title 40, Part 257, Subtitle D Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments). The Kansas CCR standards shall remain in effect until the Kansas Department of Health and Environment adopts new CCR regulations to replace those standards.
2) **Updated Permit Design Drawings**, including, but not limited to, a Plat of Survey, Facility Site Map, and an Area, Capacity, and History TABLE shall be prepared in accordance in accordance with the guidance posted on the Kansas Department of Health and Environment Bureau of Waste Management (KDHE-BWM) webpage and submitted to the Department to document any facility modifications.
3) Waste disposal in landfill disposal areas shall be limited to the following materials:
   a) coal combustion residuals (CCR) generated **on-site** at the industrial facility,
   b) industrial waste streams generated **on-site** at the facility that have been approved for disposal in the site-specific **Facility Operations Plan**.
4) Operations shall be in compliance with the approved site-specific **Facility Operations Plan**.
5) The permittee shall notify BWM **at least six (6) months prior** to the start of any construction covered by the approved construction drawings and the CQA Plan. The notification shall include the contact information of the CQA engineer, a Kansas-licensed Professional Engineer, who will be in direct supervision of overseeing, documenting, and reporting the construction.
6) Any construction shall be subject to approved construction drawings and a site-specific **Construction Quality Assurance (CQA) Plan** prepared by a licensed Kansas Professional Engineer and approved by KDHE-BWM. The CQA engineer shall submit a **CQA Report** with his/her certification to KDHE-BWM for review and approval prior to disposal of waste in the area illustrated in the approved construction drawings.
7) **Prior to the start of construction,** the CQA engineer shall ensure that the following steps have been completed:
   a) The area to be constructed, as noted in the approved construction drawings, in accordance with the permitted disposal envelope and construction details as illustrated in the approved design drawings.
   b) The area to be constructed, as noted in the construction drawings, in conformance with the as-built drawings compiled for past disposal areas that have been constructed.
   c) Disposal in the area to be constructed, as noted in the approved construction drawings, is adequately covered by the site-specific Facility Operations Plan as it relates to leachate management, storm water management, dust control, and access to the working face.
8) The permittee shall ensure that the **Groundwater Monitoring Network** and associated **Sampling and Analysis Plan (SAP)** have been reviewed and approved by KDHE-BWM.

Kansas Coal Combustion Residuals Standards

7/13/2018

Table of Contents

Modified Federal Standards

General Provisions

KCS 257.50 Scope and purpose.

(a) Reserved.

(b) The Kansas CCR Standards applies to owners and operators of new and existing CCR landfills and surface impoundments, including any lateral expansions of such units, that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. Unless otherwise provided in the Kansas CCR Standards, these requirements also apply to disposal units located off-site of the electric utility or independent power producer. The Kansas CCR Standards also applies to any practice that does not meet the definition of a beneficial use of CCR.

(c) The Kansas CCR Standards also applies to inactive CCR surface impoundments at active electric utilities or independent power producers, regardless of the fuel currently used at the facility to produce electricity.

(d) The Kansas CCR Standards does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015.

(e) The Kansas CCR Standards does not apply to electric utilities or independent power producers that have ceased producing electricity prior to October 19, 2015.

(f) The Kansas CCR Standards does not apply to wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals. The Kansas CCR Standards also does not apply to fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels (including other fossil fuels) other than coal, for the purpose of generating electricity unless the fuel burned consists of more than fifty percent (50%) coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.

(g) The Kansas CCR Standards does not apply to practices that meet the definition of a beneficial use of CCR.

(h) The Kansas CCR Standards does not apply to CCR placement at active or abandoned underground or surface coal mines.

(i) The Kansas CCR Standards does not apply to municipal solid waste landfills that receive CCR.

KCS 257.52 Applicability of other regulations.

(a) Compliance with the requirements of the Kansas CCR Standards does not affect the need for the owner or operator of a CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit to comply with all other applicable federal, state, tribal, or local laws or other requirements including the requirements in 40 CFR 257.3–1, 257.3–2, and 257.3–3.

KCS 257.53 Definitions.

The following definitions apply to the Kansas CCR Standards. Terms not defined in this section have the meaning given by the statutes in article 34 and the regulations in article 29.

Acre foot means the volume of one acre of surface area to a depth of one foot.

Active facility or ***active electric utilities or independent power producers*** means any facility subject to the requirements of the Kansas CCR Standards that is in operation on October 19, 2015. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. An off-site disposal facility is in operation if it is accepting or managing CCR on or after October 19, 2015.

Active life or ***in operation*** means the period of operation beginning with the initial placement of CCR in the CCR unit and ending at completion of closure activities in accordance with § 257.102.

Active portion means that part of the CCR unit that has received or is receiving CCR or non-CCR waste and that has not completed closure in accordance with § 257.102.

Aquifer means a geologic formation, group of formations, or portion of a formation capable of yielding usable quantities of groundwater to wells or springs.

Area-capacity curves means graphic curves which readily show the reservoir water surface area, in acres, at different elevations from the bottom of the reservoir to the maximum water surface, and the capacity or volume, in acre-feet, of the water contained in the reservoir at various elevations.

Areas susceptible to mass movement means those areas of influence (*i.e.,* areas characterized as having an active or substantial possibility of mass movement) where, because of natural or human-induced events, the movement of earthen material at, beneath, or adjacent to the CCR unit results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

Beneficial use of CCR means the CCR meet all of the following conditions:

(1) The CCR must provide a functional benefit;

(2) The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices, such as extraction;

(3) The use of the CCR must meet relevant product specifications, regulatory standards or design standards when available, and when such standards are not available, the CCR is not used in excess quantities; and

(4) When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request that environmental releases to groundwater, surface water, soil, and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below regulatory and health-based benchmarks for human and ecological receptors during use.

Closed means placement of CCR in a CCR unit has ceased, and the owner or operator has completed closure of the CCR unit in accordance with § 257.102 and has initiated post-closure care in accordance with § 257.104.

Coal combustion residuals (CCR) means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.

CCR fugitive dust means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

CCR landfill *or* ***landfill*** means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of the Kansas CCR Standards, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR. 'CCR landfill' or 'landfill' shall not mean a subsurface mine where CCR are beneficially used as fill.

CCR pile *or* ***pile*** means any noncontainerized accumulation of solid, non-flowing CCR that is placed on the land. CCR that is beneficially used offsite is not a CCR pile.

CCR surface impoundment *or* ***impoundment*** means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR. 'CCR surface impoundment' or 'impoundment' shall not mean the following types of units:

(1) Aeration ponds;
(2) cooling water ponds;
(3) leachate collection ponds;
(3) process water ponds,
(5) stormwater holding ponds;
(6) wastewater treatment ponds; or
(7) other similar units that are not designed to hold an accumulation of CCR.

CCR unit means any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified.

Dike means an embankment, berm, or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

Displacement means the relative movement of any two sides of a fault measured in any direction.

Disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste as defined in K.S.A. 65-3402 into or on any land or water so that ***such solid waste*** , or ***any*** constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including groundwaters. For purposes of the Kansas CCR Standards, disposal does not include the storage or the beneficial use of CCR.

Downstream toe means the junction of the downstream slope or face of the CCR surface impoundment with the ground surface.

Encapsulated beneficial use means a beneficial use of CCR that binds the CCR into a solid matrix that minimizes its mobilization into the surrounding environment. Encapsulated beneficial use includes use of CCR for the following:

(1) Filler or lightweight aggregate in concrete;

(2) a replacement for, or raw material used in the production of, cementitious components in concrete or bricks;

(3) filler in plastics, rubber, and similar products; or

(4) raw material in wallboard production.

Engineered slope protection measures means non-vegetative cover systems, which include but are not limited to rock riprap, concrete revetments, vegetated wave berms, concrete facing, gabions, geotextiles, or fascines.

Existing CCR landfill means a CCR landfill that receives CCR both before and after October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

Existing CCR surface impoundment means a CCR surface impoundment that receives CCR both before and after October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR surface impoundment has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

Facility means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (*e.g.,* one or more landfills, surface impoundments, or combinations of them).

Factor of safety (Safety factor) means the ratio of the forces tending to resist the failure of a structure to the forces tending to cause such failure as determined by accepted engineering practice.

Fault means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

Flood hydrograph means a graph showing, for a given point on a stream, the discharge, height, or other characteristic of a flood as a function of time.

Freeboard means the vertical distance between the lowest point on the crest of the impoundment dike and the surface of the waste contained therein.

Free liquids means liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.

Grassy vegetation means vegetation that meets both of the conditions described in paragraphs (1) and (2) of this definition:

(1) The vegetation develops shallow roots which both do not penetrate the slopes or pertinent surrounding areas of the CCR unit to a substantial depth and do not introduce the potential of internal erosion or risk of uprooting; and

(2) The vegetation creates a continuous dense cover that prevents erosion and deterioration of the surface of the slope or pertinent surrounding areas, thereby preventing deterioration of the surface.

Groundwater means water below the land surface in a zone of saturation.

Hazard potential classification means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or misoperation of the diked CCR surface impoundment or its appurtenances. The hazardous potential

classifications include high hazard potential CCR surface impoundment, significant hazard potential CCR surface impoundment, and low hazard potential CCR surface impoundment, which terms mean:

(1) *High hazard potential CCR surface impoundment* means a diked surface impoundment where failure or misoperation will probably cause loss of human life.

(2) *Low hazard potential CCR surface impoundment* means a diked surface impoundment where failure or misoperation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

(3) *Significant hazard potential CCR surface impoundment* means a diked surface impoundment where failure or misoperation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

Height means the vertical measurement from the downstream toe of the CCR surface impoundment at its lowest point to the lowest elevation of the crest of the CCR surface impoundment.

Holocene means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch, at 11,700 years before present, to present.

Hydraulic conductivity means the rate at which water can move through a permeable medium (*i.e.,* the coefficient of permeability).

Inactive CCR surface impoundment means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 and still contains both CCR and liquids on or after October 19, 2015.

Incised CCR surface impoundment means a CCR surface impoundment which is constructed by excavating entirely below the natural ground surface, holds an accumulation of CCR entirely below the adjacent natural ground surface, and does not consist of any constructed diked portion.

Inflow design flood means the flood hydrograph that is used in the design or modification of the CCR surface impoundments and its appurtenant works.

In operation means the same as *active life.*

Karst terrain means an area where karst topography, with its characteristic erosional surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, dolines, collapse shafts (sinkholes), sinking streams, caves, seeps, large springs, and blind valleys.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing CCR landfill or existing CCR surface impoundment made after October 19, 2015.

Liquefaction factor of safety means the factor of safety (safety factor) determined using analysis under liquefaction conditions.

Lithified earth material means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

Maximum horizontal acceleration in lithified earth material means the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard map, with a 98% or greater probability that the acceleration will not be exceeded in 50 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

New CCR landfill means a CCR landfill or lateral expansion of a CCR landfill that first receives CCR or commences construction after October 19, 2015. A new CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015. Overfills are also considered new CCR landfills.

New CCR surface impoundment means a CCR surface impoundment or lateral expansion of an existing or new CCR surface impoundment that first receives CCR or commences construction after October 19, 2015. A new CCR surface impoundment has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015.

Non-groundwater releases mean releases from the CCR unit other than the releases directly to the groundwater that are detected through the unit's groundwater monitoring system. Examples of non-groundwater releases include seepage through the embankment, minor ponding of seepage at the toe of the embankment of the CCR unit, seepage at the abutments of the CCR unit, seepage from slopes,

ponding at the toe of the unit, a release of fugitive dust and releases of a "catastrophic" nature such as the release of CCR materials from CCR surface impoundments from the Tennessee Valley Authority's (TVA) Kingston Fossil Plant in Harriman, TN and the Duke Energy Dan River Steam Station in Eden, NC. "Non-groundwater releases" shall not include discharges that occur in accordance with a permit issued by the state or federal government.

Operator means the person(s) responsible for the overall operation of a CCR unit.

Overfill means a new CCR landfill constructed over a closed CCR surface impoundment.

Owner means the person(s) who owns a CCR unit or part of a CCR unit.

Participating state means a state with a state program for control of CCR that has been approved pursuant to Section 4005 of the Resource Conservation and Recovery Act.

Pertinent surrounding areas means all areas of the CCR surface impoundment or immediately surrounding the CCR surface impoundment that have the potential to affect the structural stability and condition of the CCR surface impoundment, including but not limited to the toe of the downstream slope, the crest of the embankment, abutments, and unlined spillways.

Poor foundation conditions mean those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an existing or new CCR unit. For example, failure to maintain static and seismic factors of safety as required in §§ 257.73(e) and 257.74(e) would cause a poor foundation condition.

Probable maximum flood means the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the drainage basin.

Qualified person means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

Qualified professional engineer means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under the Kansas CCR Standards. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.

Recognized and generally accepted good engineering practices means engineering maintenance or operation activities based on established codes, widely accepted standards, published technical reports, or a practice widely recommended throughout the industry. Such practices generally detail approved ways to perform specific engineering, inspection, or mechanical integrity activities.

Retrofit means to remove all CCR and contaminated soils and sediments from the CCR surface impoundment, and to ensure the unit complies with the requirements in § 257.72

Run-off means any rainwater, leachate, or other liquid that drains over land from any part of a CCR landfill or lateral expansion of a CCR landfill.

Run-on means any rainwater, leachate, or other liquid that drains over land onto any part of a CCR landfill or lateral expansion of a CCR landfill.

Sand and gravel pit or quarry means an excavation for the extraction of aggregate, minerals or metals. The term sand and gravel pit and/or quarry does not include subsurface or surface coal mines.

Seismic factor of safety means the factor of safety (safety factor) determined using analysis under earthquake conditions using the peak ground acceleration for a seismic event with a 2% probability of exceedance in 50 years, equivalent to a return period of approximately 2,500 years, based on the U.S. Geological Survey (USGS) seismic hazard maps for seismic events with this return period for the region where the CCR surface impoundment is located.

Seismic impact zone means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years.

Slope protection means measures installed on the slopes or pertinent surrounding areas of the CCR unit that protect the slope against wave action, erosion or adverse effects of rapid drawdown. Slope protection includes grassy vegetation and engineered slope protection measures.

Solid waste management *or* ***management*** means the systematic administration of the activities which provide for the collection, source separation, storage, transportation, processing, treatment, or disposal of solid waste.

State means any of the fifty States in addition to the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Static factor of safety means the factor of safety (safety factor) determined using analysis under the long-term, maximum storage pool loading condition, the maximum surcharge pool loading condition, and under the end-of-construction loading condition.

Structural components mean liners, leachate collection and removal systems, final covers, run-on and run-off systems, inflow design flood control systems, and any other component used in the construction and operation of the CCR unit that is necessary to ensure the integrity of the unit and that the contents of the unit are not released into the environment.

Unstable area means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

Uppermost aquifer means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary. Upper limit is measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season.

Vegetative height means the linear distance between the ground surface where the vegetation penetrates the ground surface and the outermost growth point of the vegetation.

Waste boundary means a vertical surface located at the hydraulically downgradient limit of the CCR unit. The vertical surface extends down into the uppermost aquifer.

Woody vegetation means vegetation that develops woody trunks, root balls, or root systems which can penetrate the slopes or pertinent surrounding areas of the CCR unit to a substantial depth and introduce the potential of internal erosion or risk of uprooting.

Location Restrictions

KCS 257.60 Placement above the uppermost aquifer.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table). The owner or operator must demonstrate by the dates specified in paragraph (c) of this section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified groundwater scientist stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018, or by the effective date of the Kansas CCR Standards, whichever is later.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the internet requirements specified in § 257.107(e).

KCS 257.61 Wetlands.

(a) Each of the following units shall be subject to the requirements of K.A.R. 28-29-102(c), replacing the terms 'new MSWLF' and 'proposed MSWLF' with the term 'CCR unit':

(1) Each new CCR landfill;

(2) each existing CCR surface impoundment;

(3) each new CCR surface impoundment; and

(4) each lateral expansion of a CCR unit.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstrations required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018, or by the effective date of the Kansas CCR Standards, whichever is later.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstrations showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

KCS 257.62 Fault areas.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the CCR unit.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018, or by the effective date of the Kansas CCR Standards, whichever is later.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

KCS 257.63 Seismic impact zones.

(a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner or operator demonstrates by the dates specified in paragraph (c) of this section that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(c) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (c)(1) or (2) of this section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018, or by the effective date of the Kansas CCR Standards, whichever is later.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (c)(1) of this section is subject to the requirements of § 257.101(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

KCS 257.64 Unstable areas.

(a) An existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates by the dates specified in paragraph (d) of this section that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted.

(b) The owner or operator must consider all of the following factors, at a minimum, when determining whether an area is unstable:

(1) On-site or local soil conditions that may result in significant differential settling;

(2) On-site or local geologic or geomorphologic features; and

(3) On-site or local human-made features or events (both surface and subsurface).

(c) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this section.

(d) The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this section by the date specified in either paragraph (d)(1) or (2) of this section.

(1) For an existing CCR landfill or existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018, or by the effective date of the Kansas CCR Standards, whichever is later.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this section when the demonstration is placed in the facility's operating record as required by § 257.105(e).

(4) An owner or operator of an existing CCR surface impoundment or existing CCR landfill who fails to demonstrate compliance with the requirements of paragraph (a) of this section by the date specified in paragraph (d)(1) of this section is subject to the requirements of § 257.101(b)(1) or (d)(1), respectively.

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this section is prohibited from placing CCR in the CCR unit.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(e), the notification requirements specified in § 257.106(e), and the Internet requirements specified in § 257.107(e).

Design Criteria

KCS 257.70 Design criteria for new CCR landfills and any lateral expansion of a CCR landfill.

(a)(1) Except as provided by KCS 28-29-721, New CCR landfills and any lateral expansion of a CCR landfill must be designed, constructed, operated, and maintained with either a composite liner that meets the requirements of paragraph (b) of this section or an alternative composite liner that meets the requirements in paragraph (c) of this section, and a leachate collection and removal system that meets the requirements of paragraph (d) of this section.

(2) Prior to construction of an overfill the underlying surface impoundment must meet the requirements of § 257.102(d).

(b) A composite liner must consist of two components; the upper component consisting of, at a minimum, a 30-mil geomembrane liner (GM), and the lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec). GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The GM or upper liner component must be installed in direct and uniform contact with the compacted soil or lower liner component. The composite liner must be:

(1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the CCR or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) Constructed of materials that provide appropriate shear resistance of the upper and lower component interface to prevent sliding of the upper component including on slopes;

(3) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(4) Installed to cover all surrounding earth likely to be in contact with the CCR or leachate.

(c) If the owner or operator elects to install an alternative composite liner, all of the following requirements must be met:

(1) An *alternative composite liner* must consist of two components; the upper component consisting of, at a minimum, a 30-mil GM, and a lower component, that is not a geomembrane, with a liquid flow rate no greater than the liquid flow rate of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. If the lower component of the alternative liner is compacted soil, the GM must be installed in direct and uniform contact with the compacted soil.

(2) The owner or operator must obtain certification from a qualified professional engineer that the liquid flow rate through the lower component of the alternative composite liner is no greater than the liquid flow rate through two feet of compacted soil with a hydraulic conductivity of 1×10^{-7} cm/ sec. The hydraulic conductivity for the two feet of compacted soil used in the comparison shall be no greater than 1×10^{-7} cm/sec. The hydraulic conductivity of any alternative to the two feet of compacted soil must be determined using recognized and generally accepted methods. The liquid flow rate comparison must be made using Equation 1 of this section, which is derived from Darcy's Law for gravity flow through porous media.

(Eq. 1) $$\frac{Q}{A} = q = k\left(\frac{h}{t} + 1\right)$$

Where,
Q = flow rate (cubic centimeters/second);
A = surface area of the liner (squared centimeters);
q = flow rate per unit area (cubic centimeters/second/squared centimeter);
k = hydraulic conductivity of the liner (centimeters/second);
h = hydraulic head above the liner (centimeters); and
t = thickness of the liner (centimeters).

(3) The alternative composite liner must meet the requirements specified in paragraphs (b)(1) through (4) of this section.

(d) The leachate collection and removal system must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post-closure care period. The leachate collection and removal system must be:

(1) Designed and operated to maintain less than a 30-centimeter depth of leachate over the composite liner or alternative composite liner;

(2) Constructed of materials that are chemically resistant to the CCR and any non-CCR waste managed in the CCR unit and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover materials, and equipment used at the CCR unit; and

(3) Designed and operated to minimize clogging during the active life and post-closure care period.

(e) Prior to construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system meets the requirements of the design approved by the secretary in accordance with KCS 28-29-770.

(f) Upon completion of construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system has been constructed in accordance with the requirements of the design approved by the secretary in accordance with KCS 28-29-770.

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the Internet requirements specified in § 257.107(f).

KCS 257.71 Liner design criteria for existing CCR surface impoundments.

(a)(1) No later than the effective date of the Kansas CCR Standards, the owner or operator of an existing CCR surface impoundment must document whether or not such unit was constructed with any one of the following:

(i) A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than 1 $x10^{-7}$ cm/sec;

(ii) A composite liner that meets the requirements of § 257.70(b); or

(iii) An alternative composite liner that meets the requirements of § 257.70(c).

(2) The hydraulic conductivity of the compacted soil must be determined using recognized and generally accepted methods.

(3) An existing CCR surface impoundment is considered to be an existing unlined CCR surface impoundment if either:

(i) The owner or operator of the CCR unit determines that the CCR unit is not constructed with a liner that meets the requirements of paragraphs (a)(1)(i), (ii), or (iii) of this section; or

(ii) The owner or operator of the CCR unit fails to document whether the CCR unit was constructed with a liner that meets the requirements of paragraphs (a)(1)(i), (ii), or (iii) of this section.

(4) All existing unlined CCR surface impoundments are subject to the requirements of § 257.101(a).

(b) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer attesting that the documentation as to whether a CCR unit meets the requirements of paragraph (a) of this section is accurate.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the Internet requirements specified in § 257.107(f).

KCS 257.72 Liner design criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment.

(a) New CCR surface impoundments and lateral expansions of existing and new CCR surface impoundments must be designed, constructed, operated, and maintained with either a composite liner or an alternative composite liner that meets the requirements of § 257.70(b) or (c).

(b) Any liner specified in this section must be installed to cover all surrounding earth likely to be in contact with CCR. Dikes shall not be constructed on top of the composite liner.

(c) Prior to construction of the CCR surface impoundment or any lateral expansion of a CCR surface impoundment, the owner or operator must obtain certification from a qualified professional engineer that the design of the composite liner or, if applicable, the design of an alternative composite liner complies with the requirements of this section.

(d) Upon completion, the owner or operator must obtain certification from a qualified professional engineer that the composite liner or if applicable, the alternative composite liner has been constructed in accordance with the requirements of this section.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the Internet requirements specified in § 257.107(f).

KCS 257.73 Structural integrity criteria for existing CCR surface impoundments.

(a) The requirements of paragraphs (a)(1) through (4) of this section apply to all existing CCR surface impoundments, except for those existing CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (*e.g.,* a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this section.

(1) No later than, the effective date of the Kansas CCR Standards, the owner or operator of the CCR unit must place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the identification number of the CCR unit, if one has been assigned by the state, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) *Periodic hazard potential classification assessments.* (i) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(ii) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.

(3) *Emergency Action Plan (EAP)*—(i) *Development of the plan.* No later than the effective date of the Kansas CCR Standards, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this section must prepare and maintain a written EAP. At a minimum, the EAP must:

(A) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(B) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(C) Provide contact information of emergency responders;

(D) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(E) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(ii) *Amendment of the plan.* (A) The owner or operator of a CCR unit subject to the requirements of paragraph (a)(3)(i) of this section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(B) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(i) of this section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by § 257.105(f)(6).

(iii) *Changes in hazard potential classification.* (A) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by § 257.105(f)(5).

(B) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(i) of this section within six months of completing such periodic hazard potential assessment.

(iv) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this section.

(v) *Activation of the EAP.* The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) The slopes and pertinent surrounding areas of the CCR unit must be designed, constructed, operated, and maintained with one of the forms of slope protection specified in paragraph (a)(4)(i) of this section that meets all of the performance standards of paragraph (a)(4)(ii) of this section.

(i) Slope protection must consist of one of the following:

(A) A vegetative cover consisting of grassy vegetation;

(B) An engineered cover consisting of a single form or combination of forms of engineered slope protection measures; or

(C) A combination of the forms of cover specified in paragraphs (a)(4)(i)(A) or (a)(4)(i)(B) of this section.

(ii) Any form of cover for slope protection must meet all of the following performance standards:

(A) The cover must be installed and maintained on the slopes and pertinent surrounding areas of the CCR unit;

(B) The cover must provide protection against surface erosion, wave action, and adverse effects of rapid drawdown;

(C) The cover must be maintained to allow for the observation of and access to the slopes and pertinent surrounding areas during routine and emergency events;

(D) Woody vegetation must be removed from the slopes or pertinent surrounding areas. The owner or operator shall ensure the removal does not create a risk of destabilizing the unit or otherwise adversely affect the stability and safety of the CCR unit or personnel undertaking the removal; and

(E) The owner or operator shall mow each slope and all pertinent surrounding areas at least once every 12 months.

(b) The requirements of paragraphs (c) through (e) of this section apply to an owner or operator of an existing CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c)(1) No later than the effective date of the Kansas CCR Standards, the owner or operator of the CCR unit must compile a history of construction, which shall contain, to the extent feasible, the information specified in paragraphs (c)(1)(i) through (xi) of this section.

(i) The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(ii) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7½ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(iii) A statement of the purpose for which the CCR unit is being used.

(iv) The name and size in acres of the watershed within which the CCR unit is located.

(v) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(vi) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the approximate dates of construction of each successive stage of construction of the CCR unit.

(vii) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(viii) A description of the type, purpose, and location of existing instrumentation.

(ix) Area-capacity curves for the CCR unit.

(x) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(xi) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(xii) Any record or knowledge of structural instability of the CCR unit.

(2) *Changes to the history of construction.* If there is a significant change to any information compiled under paragraph (c)(1) of this section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by § 257.105(f)(9).

(d) ***Periodic structural stability assessments.*** (1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(i) Stable foundations and abutments;

(ii) Slope protection consistent with the requirements under paragraph (a)(4) of this section.

(iii) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(iv) Reserved.

(v) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(v)(A) of this section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(v)(B) of this section.

(A) All spillways must be either:

(*1*) Of non-erodible construction and designed to carry sustained flows; or

(*2*) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(*1*) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(*2*) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(*3*) 100-year flood for a low hazard potential CCR surface impoundment.

(vi) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion,

bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(vii) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator of the CCR unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this section.

(e) *Periodic safety factor assessments.*

(1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(i) through (iv) of this section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(i) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(ii) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(iii) The calculated seismic factor of safety must equal or exceed 1.00.

(iv) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this section meets the requirements of this section.

(f) *Timeframes for periodic assessments*—(1) *Initial assessments.* Except as provided by paragraph (f)(2) of this section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this section no later than the effective date of the Kansas CCR Standards. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this section in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(2) *Use of a previously completed assessment(s) in lieu of the initial assessment(s).* The owner or operator of the CCR unit may elect to use a previously completed assessment to serve as the initial assessment required by paragraphs (a)(2), (d), and (e) of this section provided that the previously completed assessment(s):

(i) Was completed no earlier than five years prior to the effective date of the Kansas CCR Standards; and

(ii) Meets the applicable requirements of paragraphs (a)(2), (d), and (e) of this section.

(3) *Frequency for conducting periodic assessments.* The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. If the owner or operator elects to use a previously completed assessment(s) in lieu of the initial assessment as provided by paragraph (f)(2) of this section, the date of the report for the previously completed assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(3), the owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this section has been placed in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(4) *Closure of the CCR unit.* An owner or operator of a CCR unit who either fails to complete a timely safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this section is subject to the requirements of § 257.101(b)(2).

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the internet requirements specified in § 257.107(f).

KCS 257.74 Structural integrity criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment.

(a) The requirements of paragraphs (a)(1) through (4) of this section apply to all new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, except for those new CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (*e.g.,* a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this section.

(1) No later than the initial receipt of CCR, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator of the CCR unit must place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the identification number of the CCR unit, if one has been assigned by the state, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) *Periodic hazard potential classification assessments.* (i) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(ii) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this section was conducted in accordance with the requirements of this section.

(3) *Emergency Action Plan (EAP)*—(i) *Development of the plan.* Prior to the initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this section must prepare and maintain a written EAP. At a minimum, the EAP must:

(A) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(B) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(C) Provide contact information of emergency responders;

(D) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(E) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(ii) *Amendment of the plan.* (A) The owner or operator of a CCR unit subject to the requirements of paragraph (a)(3)(i) of this section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(B) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(i) of this section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by § 257.105(f)(6).

(iii) *Changes in hazard potential classification.* (A) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment,

then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by § 257.105(f)(5).

(B) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(i) of this section within six months of completing such periodic hazard potential assessment.

(iv) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this section.

(v) *Activation of the EAP.* The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) The slopes and pertinent surrounding areas of the CCR unit must be designed, constructed, operated, and maintained with one of the forms of slope protection specified in paragraph (a)(4)(i) of this section that meets all of the performance standards of paragraph (a)(4)(ii) of this section.

(i) Slope protection must consist of one of the following:

(A) A vegetative cover consisting of grassy vegetation;

(B) An engineered cover consisting of a single form or combination of forms of engineered slope protection measures; or

(C) A combination of the forms of cover specified in paragraphs (a)(4)(i)(A) or (a)(4)(i)(B) of this section.

(ii) Any form of cover for slope protection must meet all of the following performance standards:

(A) The cover must be installed and maintained on the slopes and pertinent surrounding areas of the CCR unit;

(B) The cover must provide protection against surface erosion, wave action, and adverse effects of rapid drawdown;

(C) The cover must be maintained to allow for the observation of and access to the slopes and pertinent surrounding areas during routine and emergency events;

(D) Woody vegetation must be removed from the slopes or pertinent surrounding areas. The owner or operator shall ensure the removal does not create a risk of destabilizing the unit or otherwise adversely affect the stability and safety of the CCR unit or personnel undertaking the removal; and

(E) The owner or operator shall mow each slope and all pertinent surrounding areas at least once every 12 months.

(b) The requirements of paragraphs (c) through (e) of this section apply to an owner or operator of a new CCR surface impoundment and any lateral expansion of a CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c)(1) No later than the initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator unit must compile the design and construction plans for the CCR unit, which must include, to the extent feasible, the information specified in paragraphs (c)(1)(i) through (xi) of this section.

(i) The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(ii) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7½ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(iii) A statement of the purpose for which the CCR unit is being used.

(iv) The name and size in acres of the watershed within which the CCR unit is located.

(v) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(vi) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the dates of construction of each successive stage of construction of the CCR unit.

(vii) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(viii) A description of the type, purpose, and location of existing instrumentation.

(ix) Area-capacity curves for the CCR unit.

(x) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(xi) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(xii) Any record or knowledge of structural instability of the CCR unit.

(2) *Changes in the design and construction.* If there is a significant change to any information compiled under paragraph (c)(1) of this section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by § 257.105(f)(13).

(d) ***Periodic structural stability assessments.*** (1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(i) Stable foundations and abutments;

(ii) Slope protection consistent with the requirements under paragraph (a)(4) of this section.

(iii) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(iv) Reserved.

(v) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(v)(A) of this section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(v)(B) of this section.

(A) All spillways must be either:

(*1*) Of non-erodible construction and designed to carry sustained flows; or

(*2*) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(B) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(*1*) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(*2*) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(*3*) 100-year flood for a low hazard potential CCR surface impoundment.

(vi) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(vii) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator of the CCR unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this section.

(e) *Periodic safety factor assessments.* (1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(i) through (v) of this section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(i) The calculated static factor of safety under the end-of-construction loading condition must equal or exceed 1.30. The assessment of this loading condition is only required for the initial safety factor assessment and is not required for subsequent assessments.

(ii) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(iii) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(iv) The calculated seismic factor of safety must equal or exceed 1.00.

(v) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this section meets the requirements of this section.

(f) *Timeframes for periodic assessments.* (1) *Initial assessments.* Except as provided by paragraph (f)(2) of this section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this section prior to the initial receipt of CCR in the unit, or by the effective date of the Kansas CCR Standards, whichever is later. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this section in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(2) *Frequency for conducting periodic assessments.* The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(2), the owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this section has been placed in the facility's operating record as required by § 257.105(f)(5), (10), and (12).

(3) *Failure to document minimum safety factors during the initial assessment.* Until the date an owner or operator of a CCR unit documents that the calculated factors of safety achieve the minimum safety factors specified in paragraphs (e)(1)(i) through (v) of this section, the owner or operator is prohibited from placing CCR in such unit.

(4) *Closure of the CCR unit.* An owner or operator of a CCR unit who either fails to complete a timely periodic safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this section is subject to the requirements of § 257.101(c).

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(f), the notification requirements specified in § 257.106(f), and the internet requirements specified in § 257.107(f).

Operating Criteria

KCS 257.80 Air criteria. (a) The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

(b) *CCR fugitive dust control plan.* The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.

(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than the effective date of the Kansas CCR Standards, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to the Kansas CCR Standards after the effective date of the Kansas CCR Standards. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).

(6) *Amendment of the plan.* The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

(7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.

(c) *Annual CCR fugitive dust control report.* The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The initial annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record, or by the effective date of the Kansas CCR Standards, whichever is later. The deadline for completing a subsequent report is one year after the date of completing the previous report. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by § 257.105(g)(2).

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

KCS 257.81 Run-on and run-off controls for CCR landfills.

(a) The owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill must design, construct, operate, and maintain:

(1) A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm; and

(2) A run-off control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(b) The owner or operator of each CCR unit shall operate the unit in a manner that prevents run-off from the active portion of the CCR unit from causing a point source discharge of pollutants into the waters of the state, except in accordance with a wastewater permit or a stormwater permit, or both, issued pursuant to K.S.A. 65-164 *et seq*.

(c) *Run-on and run-off control system plan*—(1) *Content of the plan.* The owner or operator must prepare initial and periodic run-on and run-off control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this section. These plans must document how the run-on and run-off control systems have been designed and constructed to meet the applicable requirements of this section. Each plan must be supported by appropriate engineering calculations. The owner or operator has completed the initial run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).

(2) *Amendment of the plan.* The owner or operator may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(3). The owner or operator must amend the written run-on and runoff control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) *Timeframes for preparing the initial plan*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must prepare the initial run-on and runoff control system plan no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator must prepare the initial runon and run-off control system plan no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(4) *Frequency for revising the plan.* The owner or operator of the CCR unit must prepare periodic run-on and runoff control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first subsequent plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(3).

(5) The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this section.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

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KCS 257.82 Hydrologic and hydraulic capacity requirements for CCR surface impoundments.

(a) The owner or operator of an existing or new CCR surface impoundment or any lateral expansion of a CCR surface impoundment must design, construct, operate, and maintain an inflow design flood control system as specified in paragraphs (a)(1) and (2) of this section.

(1) The inflow design flood control system must adequately manage flow into the CCR unit during and following the peak discharge of the inflow design flood specified in paragraph (a)(3) of this section.

(2) The inflow design flood control system must adequately manage flow from the CCR unit to collect and control the peak discharge resulting from the inflow design flood specified in paragraph (a)(3) of this section.

(3) The inflow design flood is:

(i) For a high hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the probable maximum flood;

(ii) For a significant hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the 1,000-year flood;

(iii) For a low hazard potential CCR surface impoundment, as determined under § 257.73(a)(2) or § 257.74(a)(2), the 100-year flood; or

(iv) For an incised CCR surface impoundment, the 25-year flood.

(b) The owner or operator of each CCR unit shall operate the unit in a manner that prevents managed discharge from the CCR unit from causing a point source discharge of pollutants into the waters of the state, except in accordance with a wastewater permit or a stormwater permit, or both, issued for the unit pursuant to K.S.A. 65-164 *et seq.*

(c) *Inflow design flood control system plan*—(1) *Content of the plan.* The owner or operator must prepare initial and periodic inflow design flood control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this section. These plans must document how the inflow design flood control system has been designed and constructed to meet the requirements of this section. Each plan must be supported by appropriate engineering calculations. The owner or operator of the CCR unit has completed the inflow design flood control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(4).

(2) *Amendment of the plan.* The owner or operator of the CCR unit may amend the written inflow design flood control system plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(4). The owner or operator must amend the written inflow design flood control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) *Timeframes for preparing the initial plan*—(i) *Existing CCR surface impoundments.* The owner or operator of the CCR unit must prepare the initial inflow design flood control system plan no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.* The owner or operator must prepare the initial inflow design flood control system plan no later than the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(4) *Frequency for revising the plan.* The owner or operator must prepare periodic inflow design flood control system plans required by paragraph (c)(1) of this section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first periodic plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed an inflow design flood control system plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(4).

(5) The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic inflow design flood control system plans meet the requirements of this section.

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

KCS 257.83 Inspection requirements for CCR surface impoundments.

(a) *Inspections by a qualified person.*

(1) Except as provided in KCS 28-29-731, all CCR surface impoundments and any lateral expansion of a CCR surface impoundment must be examined by a qualified person as follows:

(i) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit;

(ii) At intervals not exceeding seven days, inspect the discharge of all outlets of hydraulic structures which pass underneath the base of the surface impoundment or through the dike of the CCR unit for abnormal discoloration, flow or discharge of debris or sediment; and

(iii) At intervals not exceeding 30 days, monitor all CCR unit instrumentation.

(iv) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by § 257.105(g)(5).

(2) *Timeframes for inspections by a qualified person*—(i) *Existing CCR surface impoundments.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section upon initial receipt of CCR by the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(b) Annual i*nspections by a qualified professional engineer.*

(1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under § 257.73(d) or § 257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (*e.g.,* CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections);

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

(iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

(2) *Inspection report.* The qualified professional engineer must prepare a report following each inspection that addresses the following:

(i) Any changes in geometry of the impounding structure since the previous annual inspection;

(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;

(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;

(iv) The storage capacity of the impounding structure at the time of the inspection;

(v) The approximate volume of the impounded water and CCR at the time of the inspection;

(vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and

(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

(3) *Timeframes for conducting the initial inspection*—(i) *Existing CCR surface impoundments.* The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this section no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.* The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this section is completed no later than 14 months following the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(4) *Frequency of inspections.* (i) Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by § 257.105(g)(6).

(ii) In any calendar year in which both the periodic inspection by a qualified professional engineer and the quinquennial (occurring every five years) structural stability assessment by a qualified professional engineer required by §§ 257.73(d) and 257.74(d) are required to be completed, the annual inspection is

not required, provided the structural stability assessment is completed during the calendar year. If the annual inspection is not conducted in a year as provided by this paragraph (b)(4)(ii), the deadline for completing the next annual inspection is one year from the date of completing the quinquennial structural stability assessment.

(5) If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release in accordance with applicable requirements in §§ 257.96 through 257.99.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

KCS 257.84 Inspection requirements for CCR landfills.

(a) *Inspections by a qualified person.* (1) Except as provided in KCS 28-29-731, All CCR landfills and any lateral expansion of a CCR landfill must be examined by a qualified person as follows:

(i) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit; and

(ii) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by § 257.105(g)(8).

(2) *Timeframes for inspections by a qualified person*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this section upon initial receipt of CCR by the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(b) *Annual inspections by a qualified professional engineer.* (1) Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (*e.g.,* the results of inspections by a qualified person, and results of previous annual inspections); and

(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

(2) *Inspection report.* The qualified professional engineer must prepare a report following each inspection that addresses the following:

(i) Any changes in geometry of the structure since the previous annual inspection;

(ii) The approximate volume of CCR contained in the unit at the time of the inspection;

(iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and

(iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

(3) *Timeframes for conducting the initial inspection*—(i) *Existing CCR landfills.* The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this section no later than the effective date of the Kansas CCR Standards.

(ii) *New CCR landfills and any lateral expansion of a CCR landfill.* The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this section no later than 14 months following the date of initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later.

(4) *Frequency of inspections.* The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has

completed an inspection when the inspection report has been placed in the facility's operating record as required by § 257.105(g)(9).

(5) If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release in accordance with applicable requirements in §§ 257.96 through 257.99.

(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

Groundwater Monitoring and Corrective Action

KCS 257.90 Applicability.

(a) All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under §§ 257.90 through 257.99, except as provided in paragraph (g) of this section.

(b) *Initial timeframes*—(1) *Existing CCR landfills and existing CCR surface impoundments.* No later than the effective date of the Kansas CCR Standards, the owner or operator of the CCR unit must be in compliance with the following groundwater monitoring requirements:

(i) Install the groundwater monitoring system as required by § 257.91;

(ii) Develop the groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by § 257.93;

(iii) Initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background and downgradient well as required by § 257.94(b); and

(iv) Begin evaluating the groundwater monitoring data for statistically significant increases over background levels for the constituents listed in appendix III as required by § 257.94.

(2) *New CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units.* Prior to initial receipt of CCR by the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator must be in compliance with the groundwater monitoring requirements specified in paragraph (b)(1)(i) and (ii) of this section. In addition, the owner or operator of the CCR unit must initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background well as required by § 257.94(b).

(c) Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by the Kansas CCR Standards, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR unit.

(d) In the event of a release from a CCR unit, the owner or operator must immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. The owner or operator of the CCR unit must comply with all applicable requirements in §§ 257.96, 257.97, and 257.98, or, if eligible, must comply with the requirements in § 257.99.

(e) *Annual groundwater monitoring and corrective action report.* For existing CCR landfills and existing CCR surface impoundments, no later than January 31 of the year following the calendar year of the effective date of the Kansas CCR Standards, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by the Kansas CCR Standards, or by the effective date of the Kansas CCR Standards, whichever is later, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

(1) A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

(2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

(3) In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

(4) A narrative discussion of any transition between monitoring programs (*e.g.,* the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

(5) Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

(g) *Suspension of groundwater monitoring requirements*. (1) Except as provided by paragraph (g)(2) of this section, the secretary may suspend for up to ten years the groundwater monitoring requirements under §§ 257.90 through 257.95 for a CCR unit if the owner or operator provides written documentation that there is no potential for migration of the constituents listed in appendices III and IV from that CCR unit to the uppermost aquifer during the active life of the CCR unit and the post-closure care period. This demonstration must be certified by a qualified groundwater scientist and approved by the secretary, and must be based upon:

(i) Site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport; and

(ii) Contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and the environment.

(2) The owner or operator of the CCR unit may secure an additional ten years for the suspension of the groundwater monitoring requirements provided the owner or operator provides written documentation that there continues to be no potential for migration of the constituents listed in appendices III and IV . The documentation must be supported by, at a minimum, the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section and must be certified by a qualified groundwater scientist and approved by the secretary. The owner or operator must submit the documentation of their re-demonstration for the state's review and approval of their extension one year before their groundwater monitoring suspension is due to expire. If the existing groundwater monitoring extension expires, the owner or operator must begin groundwater monitoring according to paragraph (a) of this section within 90 days. The owner or operator may obtain additional ten-year groundwater monitoring suspensions provided the owner or operator continues to make the written demonstration. The owner or operator must place each completed demonstration, if more than one ten-year suspension period is sought, in the facility's operating record.

KCS 257.91 Groundwater monitoring systems.

(a) *Performance standard.* The owner or operator of a CCR unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that:

(1) Accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where:

(i) Hydrogeologic conditions do not allow the owner or operator of the CCR unit to determine what wells are hydraulically upgradient; or

(ii) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells; and

(2) Accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary or at the closest practical distance from the waste boundary, determined in accordance with KCS 28-29-742, that ensures detection

of groundwater contamination in the uppermost aquifer. All potential contaminant pathways must be monitored.

(b) The number, spacing, and depths of monitoring systems shall be determined based upon site-specific technical information that must include thorough characterization of:

(1) Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and

(2) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.

(c) The groundwater monitoring system must include the minimum number of monitoring wells necessary to meet the performance standards specified in paragraph (a) of this section, based on the site-specific information specified in paragraph (b) of this section. The groundwater monitoring system must contain:

(1) A minimum of one upgradient and three downgradient monitoring wells; and

(2) Additional monitoring wells as necessary to accurately represent the quality of background groundwater that has not been affected by leakage from the CCR unit and the quality of groundwater passing the waste boundary of the CCR unit.

(d) The owner or operator of multiple CCR units may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit.

(1) The multiunit groundwater monitoring system must be equally as capable of detecting monitored constituents at the waste boundary of the CCR unit as the individual groundwater monitoring system specified in paragraphs (a) through (c) of this section for each CCR unit based on the following factors:

(i) Number, spacing, and orientation of each CCR unit;

(ii) Hydrogeologic setting;

(iii) Site history; and

(iv) Engineering design of the CCR unit.

(2) If the owner or operator elects to install a multiunit groundwater monitoring system, and if the multiunit system includes at least one existing unlined CCR surface impoundment as determined by § 257.71(a), and if at any time after the effective date of the Kansas CCR Standards the owner or operator determines in any sampling event that the concentrations of one or more constituents listed in appendix IV are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for the multiunit system, then all unlined CCR surface impoundments comprising the multiunit groundwater monitoring system are subject to the closure requirements under § 257.101(a) to retrofit or close unless a waiver to these requirements has been granted in accordance with KCS 28-29-751.

(e) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well borehole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (*i.e.,* the space between the borehole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.

(1) The owner or operator of the CCR unit must document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices. The qualified groundwater scientist must be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (f) of this section.

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.

(f) The owner or operator must obtain a certification from a qualified groundwater scientist stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this section. If the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph (c)(1) of this section, the certification must document the basis supporting this determination.

(g) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

KCS 257.92 [Reserved]

KCS 257.93 Groundwater sampling and analysis requirements.

(a) The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of groundwater quality at the background and downgradient wells required by § 257.91. The owner or operator of the CCR unit must develop a sampling and analysis program that includes procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures;

(4) Chain of custody control; and

(5) Quality assurance and quality control.

(b) The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples. For purposes of §§ 257.90 through 257.98, the term *constituent* refers to both hazardous constituents and other monitoring parameters listed in either appendix III or IV .

(c) Groundwater elevations must be measured in each well immediately prior to purging, each time groundwater is sampled. The owner or operator of the CCR unit must determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same CCR management area must be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.

(d) The owner or operator of the CCR unit must establish background groundwater quality in a hydraulically upgradient or background well(s) for each of the constituents required in the particular groundwater monitoring program that applies to the CCR unit as determined under § 257.94(a) or § 257.95(a). Background groundwater quality may be established at wells that are not located hydraulically upgradient from the CCR unit if it meets the requirements of § 257.91(a)(1).

(e) The number of samples collected when conducting detection monitoring and assessment monitoring (for both downgradient and background wells) must be consistent with the statistical procedures chosen under paragraph (f) of this section and the performance standards under paragraph (g) of this section. The sampling procedures shall be those specified under § 257.94(b) through (d) for detection monitoring, § 257.95(b) through (d) for assessment monitoring, and § 257.96(b) for corrective action.

(f) The owner or operator of the CCR unit must select one of the statistical methods specified in paragraphs (f)(1) through (5) of this section to be used in evaluating groundwater monitoring data for each specified constituent. The statistical test chosen shall be conducted separately for each constituent in each monitoring well.

(1) A parametric analysis of variance followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(2) An analysis of variance based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(3) A tolerance or prediction interval procedure, in which an interval for each constituent is established from the distribution of the background data and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(4) A control chart approach that gives control limits for each constituent.

(5) Another statistical test method that meets the performance standards of paragraph (g) of this section.

(6) The owner or operator of the CCR unit must obtain a certification from a qualified groundwater scientist stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.

(g) Any statistical method chosen under paragraph (f) of this section shall comply with the following performance standards, as appropriate, based on the statistical test method used:

(1) The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of constituents. Normal distributions of data values shall use parametric methods. Non-normal distributions shall use non-parametric methods. If the distribution of the constituents is shown by the owner or operator of the CCR unit to be inappropriate for a normal theory test, then the data must be transformed or a distribution-free (non-parametric) theory test must be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(3) If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter values shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. The parameter values shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(4) If a tolerance interval or a predictional interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be such that this approach is at least as effective as any other approach in this section for evaluating groundwater data. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(5) The statistical method must account for data below the limit of detection with one or more statistical procedures that shall be at least as effective as any other approach in this section for evaluating groundwater data. Any practical quantitation limit that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the owner or operator.

(6) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability, the impact of irrigation wells, as well as temporal correlation in the data.

(h) The owner or operator of the CCR unit must determine whether or not there is a statistically significant increase over background values for each constituent required in the particular groundwater monitoring program that applies to the CCR unit, as determined under § 257.94(a) or § 257.95(a).

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality of each constituent at each monitoring well designated pursuant to § 257.91(a)(2) or (d)(1) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (f) and (g) of this section.

(2) Within 90 days after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.

(i) The owner or operator must measure ‘‘total recoverable metals’’ concentrations in measuring groundwater quality. Measurement of total recoverable metals captures both the particulate fraction and dissolved fraction of metals in natural waters. Groundwater samples shall not be field-filtered prior to analysis.

(j) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

KCS 257.94 Detection monitoring program.

(a) The owner or operator of a CCR unit must conduct detection monitoring at all groundwater monitoring wells consistent with this section. At a minimum, a detection monitoring program must include groundwater monitoring for all constituents listed in appendix III .

(b) Except as provided in paragraph (d) of this section, the monitoring frequency for the constituents listed in appendix III shall be at least semiannual during the active life of the CCR unit and the post-closure period. For existing CCR landfills and existing CCR surface impoundments, a minimum of eight independent samples from each background and downgradient well must be collected and analyzed for the constituents listed in appendix III and IV no later than the effective date of the Kansas CCR Standards. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, a minimum of eight independent samples for each background well must be collected and analyzed for the constituents listed in appendices III and IV during the first six months of sampling.

(c) The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well.

(d) The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix III during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (d)(1) and (2) of this section.

(1) Information documenting the need for less frequent sampling. The alternative frequency must be based on consideration of the following factors:

(i) Lithology of the aquifer and unsaturated zone;

(ii) Hydraulic conductivity of the aquifer and unsaturated zone; and

(iii) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay establishment of an assessment monitoring program.

(3) The owner or operator must obtain a certification from a qualified groundwater scientist stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified groundwater scientist in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(4) The owner or operator may only use the alternative monitoring frequency after it has been approved by the secretary in accordance with KCS 28-29-770 .

(e) If the owner or operator of the CCR unit determines, pursuant to § 257.93(h) that there is a statistically significant increase over background levels for one or more of the constituents listed in appendix III at any monitoring well at the waste boundary specified under § 257.91(a)(2), the owner or operator must:

(1) Except as provided for in paragraph (e)(2) of this section, within 90 days of detecting a statistically significant increase over background levels for any constituent, establish an assessment monitoring program meeting the requirements of § 257.95.

(2) The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration and submit the demonstration to the department within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified groundwater scientist verifying the accuracy of the information in the report. If a demonstration is submitted to the department within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this section until the review of the demonstration has been completed by the secretary. If a successful demonstration is approved by the secretary in accordance with KCS 28-29-770, the owner or operator of the CCR unit may continue with a detection monitoring program under this section. If the owner or operator of the CCR unit is notified by the secretary that the demonstration has not been approved, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual

groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified groundwater scientist.

(3) If an assessment monitoring program has been established, the owner or operator of a CCR unit must prepare a notification stating that an assessment monitoring program has been established. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(5).

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

KCS 257.95 Assessment monitoring program.

(a) Assessment monitoring is required whenever a statistically significant increase over background levels has been detected for one or more of the constituents listed in appendix III .

(b) Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator of the CCR unit must sample and analyze the groundwater for all constituents listed in appendix IV. The number of samples collected and analyzed for each well during each sampling event must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each well.

(c) The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in appendix IV during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis. The demonstration must be supported by, at a minimum, the information specified in paragraphs (c)(1) and (2) of this section.

(1) Information documenting the need for less frequent sampling. The alternative frequency must be based on consideration of the following factors:

(i) Lithology of the aquifer and unsaturated zone;

(ii) Hydraulic conductivity of the aquifer and unsaturated zone; and

(iii) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay the initiation of any necessary remediation measures.

(3) The owner or operator must obtain a certification from a qualified groundwater scientist stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified groundwater scientist in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(4) The owner or operator may only use the alternative monitoring frequency after the monitoring frequency has been approved by the secretary in accordance with KCS 28-29-770 .

(d) After obtaining the results from the initial and subsequent sampling events required in paragraph (b) of this section, the owner or operator must:

(1) Within 90 days of obtaining the results, and on at least a semiannual basis thereafter, resample all wells that were installed pursuant to the requirements of § 257.91, conduct analyses for all parameters in appendix III and for those constituents in appendix IV that are detected in response to paragraph (b) of this section, and record their concentrations in the facility operating record. The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with § 257.93(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well;

(2) Establish groundwater protection standards for all constituents detected pursuant to paragraph (b) or (d) of this section. The groundwater protection standards must be established in accordance with paragraph (h) of this section; and

(3) Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by § 257.90(e).

(e) If the concentrations of all constituents listed in appendices III and IV are shown to be at or below background values, using the statistical procedures in § 257.93(g), for two consecutive sampling events, the owner or operator may return to detection monitoring of the CCR unit if the demonstration is approved by the secretary in accordance with KCS 28-29-770. The owner or operator must prepare a notification stating that detection monitoring is resuming for the CCR unit. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(7).

(f) If the concentrations of any constituent in appendices III and IV are above background values, but all concentrations are below the groundwater protection standard established under paragraph (h) of this section, using the statistical procedures in § 257.93(g), the owner or operator must continue assessment monitoring in accordance with this section.

(g) If one or more constituents in appendix IV are detected at statistically significant levels above the groundwater protection standard established under paragraph (h) of this section in any sampling event, the owner or operator must prepare a notification identifying the constituents in appendix IV that have exceeded the groundwater protection standard. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by § 257.105(h)(8). Unless a successful demonstration is made in accordance with paragraph (3)(ii) of this subsection, the owner or operator of the CCR unit also must:

(1) Characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected. The characterization must be sufficient to support a complete and accurate assessment of the corrective measures necessary to effectively clean up all releases from the CCR unit pursuant to § 257.96. Characterization of the release includes the following minimum measures:

(i) Install additional monitoring wells necessary to define the contaminant plume(s);

(ii) Collect data on the nature and estimated quantity of material released including specific information on the constituents listed in appendix IV and the levels at which they are present in the material released;

(iii) Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with paragraph (d)(1) of this section; and

(iv) Sample all wells in accordance with paragraph (d)(1) of this section to characterize the nature and extent of the release.

(2) Notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with paragraph (g)(1) of this section. The owner or operator has completed the notifications when they are placed in the facility's operating record as required by § 257.105(h)(8).

(3) Within 90 days of finding that any of the constituents listed in appendix IV have been detected at a statistically significant level exceeding the groundwater protection standards the owner or operator must either:

(i) Initiate an assessment of corrective measures as required by § 257.96; or

(ii) Submit a demonstration to the department that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified groundwater scientist. If the demonstration is approved by the secretary in accordance with KCS 28-29-770 , the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section, and may return to detection monitoring if the constituents in appendices III and IV are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified groundwater scientist.

(4) If the owner or operator of the CCR unit is notified by the secretary that the demonstration has not been approved, within 90 calendar days of receiving the notification the owner or operator of the CCR unit must initiate the assessment of corrective measures requirements under § 257.96.

(5) If an assessment of corrective measures is required under § 257.96 by either paragraph (g)(3)(i) or (g)(4) of this section, and if the CCR unit is an existing unlined CCR surface impoundment as determined by § 257.71(a), then the CCR unit is subject to the closure requirements under § 257.101(a) to retrofit or close unless a waiver to these requirements has been granted in accordance with KCS 28-

29-751. In addition, the owner or operator must prepare a notification stating that an assessment of corrective measures has been initiated.

(h) The owner or operator of the CCR unit must establish a groundwater protection standard for each constituent in appendix IV detected in the groundwater. The groundwater protection standard shall be:

(1) For constituents for which a maximum contaminant level (MCL) has been established under KCS 28-29-741, the MCL for that constituent;

(2) For constituents for which an MCL has not been established, the background concentration for the constituent established from wells in accordance with § 257.91, except as provided by paragraph (j) of this section; or

(3) For constituents for which the background level is higher than the MCL identified under paragraph (h)(1) of this section, the background concentration.

(i) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

(j) The secretary may establish an alternative groundwater protection standard for constituents listed in appendix IV for which MCLs have not been established.

(1) The alternative groundwater protection standards must be appropriate health-based levels that are protective of potential receptors (both human and ecological) and satisfy all of the following criteria:

(i) The alternative groundwater protection standard is at a level derived in a manner consistent with EPA guidelines for assessing the health risks of environmental pollutants, including "Guidelines for Carcinogen Risk Assessment", "Supplementary Guidance for Conducting Health Risk Assessment of Chemical Mixtures", "Guidelines for Developmental Toxicity Risk Assessment", and "Reference Dose, (RfD): Description and Use in Health Risk Assessments";

(ii) The alternative groundwater protection standard is at a level based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards (40 CFR part 792) or equivalent;

(iii) For carcinogens, the level represents a concentration associated with an excess lifetime cancer-risk level, due to continuous lifetime exposure, within the 1×10^{-4} to 1×10^{-6} range; and

(iv) For systemic toxicants, the level represents a concentration to which the human population could be exposed on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime; this must be the level that ensures a Hazard Quotient no greater than 1. For purposes of this subpart, systemic toxicants are toxic chemicals that cause effects other than cancer.

(2) In establishing alternative groundwater protection standards under paragraph (j)(1) of this section, the secretary may consider the following:

(i) Multiple contaminants in the groundwater;

(ii) Exposure threats to sensitive environmental receptors; and

(iii) Other site-specific exposure or potential exposure to groundwater.

(3) The owner or operator of the CCR unit must document in the annual groundwater monitoring and corrective action report required by § 257.90(e) or § 257.100(e)(5)(ii) the constituent(s) and level(s) for which an alternative groundwater protection standard has been established by the secretary.

KCS 257.96 Assessment of corrective measures.

(a) Within 90 days of finding that any constituent listed in appendix IV has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances and the demonstration has been approved by the secretary in accordance with KCS 28-29-770. The owner or operator must obtain a certification from a qualified professional engineer, if the release is a non-groundwater release, or a qualified groundwater scientist, if the release is a groundwater release, attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §

257.90(e), in addition to the certification by a qualified professional engineer or a qualified groundwater scientist.

(b) If the unit is in an assessment monitoring program**,** the owner or operator of the CCR unit must continue to monitor groundwater in accordance with the assessment monitoring program as specified in § 257.95.

(c) The assessment under paragraph (a) of this section must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under § 257.97 addressing at least the following:

(1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

(2) The time required to begin and complete the remedy;

(3) The institutional requirements, such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).

(d) The owner or operator must place the completed assessment of corrective measures in the facility's operating record. The assessment has been completed when it is placed in the facility's operating record as required by § 257.105(h)(10).

(e) The owner or operator must discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy, in a public meeting with interested and affected parties. The owner or operator shall notify the department of the public meeting at least 30 days before the public meeting.

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

KCS 257.97 Selection of remedy.

(a) Based on the results of the corrective measures assessment conducted under § 257.96, the owner or operator must, as soon as feasible, select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this section. This requirement applies to, not in place of, any applicable standards under the Occupational Safety and Health Act. The owner or operator must prepare a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, the owner or operator must prepare a final report describing the selected remedy and how it meets the standards specified in paragraph (b) of this section. The owner or operator must obtain a certification from a qualified professional engineer, if the release is a non-groundwater release, or a qualified groundwater scientist, if the release is a groundwater release, that the remedy selected meets the requirements of this section. The report has been completed when it has been approved by the secretary in accordance with KCS 28-29-770 and is placed in the operating record as required by § 257.105(h)(12).

(b) Remedies must:

(1) Be protective of human health and the environment;

(2) If the release is a groundwater release, attain the groundwater protection standard as specified pursuant to § 257.95(h);

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV into the environment;

(4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems;

(5) Comply with standards for management of wastes as specified in § 257.98(d).

(c) In selecting a remedy that meets the standards of paragraph (b) of this section, the owner or operator of the CCR unit shall consider the following evaluation factors:

(1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(i) Magnitude of reduction of existing risks;

(ii) Magnitude of residual risks in terms of likelihood of further releases due to CCR remaining following implementation of a remedy;

(iii) The type and degree of long-term management required, including monitoring, operation, and maintenance;

(iv) Short-term risks that might be posed to the community or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal of contaminant;

(v) Time until full protection is achieved;

(vi) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment;

(vii) Long-term reliability of the engineering and institutional controls; and

(viii) Potential need for replacement of the remedy.

(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

(i) The extent to which containment practices will reduce further releases; and

(ii) The extent to which treatment technologies may be used.

(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

(i) Degree of difficulty associated with constructing the technology;

(ii) Expected operational reliability of the technologies;

(iii) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(iv) Availability of necessary equipment and specialists; and

(v) Available capacity and location of needed treatment, storage, and disposal services.

(4) The degree to which community concerns are addressed by a potential remedy(s).

(d) The owner or operator must specify as part of the selected remedy a schedule(s) for implementing and completing remedial activities. Such a schedule must require the completion of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (6) of this section. The owner or operator of the CCR unit must consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination, as determined by the characterization required under § 257.95(g);

(2) Reasonable probabilities of remedial technologies in achieving compliance with the groundwater protection standards established under § 257.95(h) and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for CCR managed during implementation of the remedy;

(4) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(5) Resource value of the aquifer including:

(i) Current and future uses;

(ii) Proximity and withdrawal rate of users;

(iii) Groundwater quantity and quality;

(iv) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to CCR constituents;

(v) The hydrogeologic characteristic of the facility and surrounding land; and

(vi) The availability of alternative water supplies; and

(6) Other relevant factors.

(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

(f) The secretary may determine that remediation of a release of a constituent listed in appendix IV from a CCR unit is not necessary if the owner or operator demonstrates to the satisfaction of the secretary that:

(1) The groundwater is additionally contaminated by substances that have originated from a source other than a CCR unit and those substances are present in concentrations such that cleanup of the release from the CCR unit would provide no significant reduction in risk to actual or potential receptors; or

(2) The constituent(s) is present in groundwater that:

(i) Is not currently or reasonably expected to be a source of drinking water; and

(ii) Is not hydraulically connected with a potential drinking water source to which the constituent(s) is migrating or is likely to migrate in a concentration(s) that would exceed the groundwater protection standards established under § 257.95(h) or (i); or

(3) Remediation of the release(s) is technically impracticable; or

(4) Remediation results in unacceptable cross-media impacts.

(g) A determination by the secretary pursuant to paragraph (f) of this section shall not affect the requirement under § 257.90(d) and § 257.97(b) for the owner or operator to undertake source control measures or other measures (including closure if triggered) that may be necessary to eliminate or minimize further releases to the groundwater, to prevent exposure to the groundwater, or to remediate the groundwater to concentrations that are technically feasible and significantly reduce threats to human health or the environment.

KCS 257.98 Implementation of the corrective action program.

(a) Within 90 days of selecting a remedy under § 257.97, the owner or operator must initiate remedial activities. Based on the schedule established under § 257.97(d) for implementation and completion of remedial activities the owner or operator must:

(1) If the release is a groundwater release, establish and implement a corrective action groundwater monitoring program that:

(i) At a minimum, meets the requirements of an assessment monitoring program under § 257.95;

(ii) Documents the effectiveness of the corrective action remedy; and

(iii) Demonstrates compliance with the groundwater protection standard pursuant to paragraph (c) of this section.

(2) Implement the corrective action remedy selected under § 257.97; and

(3) Take any interim measures necessary to reduce the contaminants leaching from the CCR unit, and/or potential exposures to human or ecological receptors. Interim measures must, to the greatest extent feasible, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to § 257.97. The following factors must be considered by an owner or operator in determining whether interim measures are necessary:

(i) Time required to develop and implement a final remedy;

(ii) Actual or potential exposure of nearby populations or environmental receptors to any of the constituents listed in appendix IV;

(iii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iv) Further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;

(v) Weather conditions that may cause any of the constituents listed in appendix IV to migrate or be released;

(vi) Potential for exposure to any of the constituents listed in appendix IV as a result of an accident or failure of a container or handling system; and

(vii) Other situations that may pose threats to human health and the environment.

(b) If an owner or operator of the CCR unit, determines, at any time, that compliance with the requirements of § 257.97(b) is not being achieved through the remedy selected, the owner or operator must select, in accordance with the requirements of KCS 257.97, and implement other methods or techniques that could feasibly achieve compliance with the requirements.

(c) Remedies selected pursuant to § 257.97 shall be considered complete when all of the following conditions have been met and completion has been approved by the secretary in accordance with KCS 28-29-770 :

(1) If the release is a groundwater release, the owner or operator of the CCR unit demonstrates compliance with the groundwater protection standards established under § 257.95(h) has been achieved at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under § 257.91 ;

(2) Except as provided by KCS 28-29-744, compliance with the groundwater protection standards established under § 257.95(h) has been achieved by demonstrating that concentrations of constituents listed in appendix IV have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in § 257.93(f) and (g); and

(3) All actions required to complete the remedy have been satisfied.

(d) All CCR that are managed pursuant to a remedy required under § 257.97, or an interim measure required under paragraph (a)(3) of this section, shall be managed in a manner that complies with the requirements of article 29, article 34, and the Kansas CCR Standards.

(e) Upon completion of the remedy, the owner or operator must prepare a notification stating that the remedy has been completed. The owner or operator must obtain a certification from a qualified professional engineer, if the release was a non-groundwater release, or a qualified groundwater scientist, if the release was a groundwater release, attesting that the remedy has been completed in compliance with the requirements of paragraph (c) of this section. The notification has been completed when it is placed in the operating record as required by § 257.105(h)(13).

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

KCS 257.99 Corrective action procedures to remedy eligible non-groundwater releases.

(a) General. This section specifies the corrective action requirements that apply to non-groundwater releases from CCR units that can be completely remediated within 180 days from the detection of the release, as calculated in accordance with KCS 28-29-745. A release is completely remediated when either a qualified professional engineer or the secretary completes the certification required in subsection (c)(3) of this section. If the owner or operator determines, at any time, that the release will not be completely remediated within this 180-day timeframe or within any time extension granted by the secretary in accordance with KCS 28-29-745, the owner or operator must comply with all additional procedural requirements specified in §§ 257.96, 257.97, and 257.98.

(b) Corrective action requirements. Upon detection of a non-groundwater release from a CCR unit, the owner or operator must comply with all of the following requirements:

(1) Meet the requirement in § 257.90(d) to "immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment;"

(2)(i) Determine the corrective measures that will meet the substantive standards in §257.96(a) to prevent further releases, to remediate any releases and to restore the affected area to original conditions; and

(ii) Analyze the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described in § 257.96(c);

(3) Select the corrective action that will remedy the non-groundwater release, taking into account, at a minimum, the results of the assessment in paragraph (b)(2)(ii) of this section and the factors specified in § 257.97(c); and

(4) Remediate the non-groundwater release to meet the standards specified in § 257.97(b)(1), (3), (4), and (5).

(5) Complete remedy within 180 days of the date of discovery of the release.

(c) Required notices and reports. An owner or operator of a CCR unit that complies with the requirements of this section to remediate a non-groundwater release is responsible for ensuring that the notices and reports specified in paragraphs (c)(1) through (c)(3) of this section are completed in accordance with this section. All required notices and reports must be signed by the owner or operator.

(1) Within 15 days of discovering a non-groundwater release, the owner or operator must prepare a notification of discovery of a non-groundwater release. The owner or operator has completed the notification when it has been submitted to the department and has been placed in the facility's operating record as required by § 257.105(h)(15).

(2) Within 15 days of completing the analysis of the effectiveness of potential corrective measures as required by paragraph (b)(2)(ii) of this section, place the completed analysis in the facility's operating record.

(3) Within 30 days of completion of a corrective action of a non-groundwater release, the owner or operator must prepare a report documenting the completion of the corrective action. The report must, at a minimum, describe the nature and extent of the non-groundwater release, the CCR unit(s) responsible for the non-groundwater release, and how the remedy selected achieves the corrective action requirements specified in paragraph (b) of this section. The report must include a certification by a qualified professional engineer that the corrective action has been completed in accordance with the requirements

of paragraph (b) of this section. The owner or operator has completed the report when it has been placed in the facility's operating record as required by § 257.105(h)(16).

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

(e) The owner or operator of the CCR unit shall comply with the requirements of KCS 28-29-745.

Closure and Post-Closure Care

KCS 257.100 Inactive CCR surface impoundments.

(a) Inactive CCR surface impoundments are subject to all of the requirements of this subpart applicable to existing CCR surface impoundments, except the location restriction demonstrations required by KCS 257.60 through KCS 257.64.

(b) Reserved.

(c) Reserved.

(d) Reserved.

(e) Timeframes for certain inactive CCR surface impoundments. (1) An inactive CCR surface impoundment for which the owner or operator has completed the actions by the deadlines specified in paragraphs (e)(1)(i) through (iii) of this section is eligible for the alternative timeframes specified in paragraphs (e)(3) through (6) of this section. The owner or operator of the CCR unit must comply with the applicable recordkeeping, notification, and internet requirements associated with these provisions. For the inactive CCR surface impoundment:

(i) The owner or operator must have prepared and placed in the facility's operating record by December 17, 2015, a notification of intent to initiate closure of the inactive CCR surface impoundment pursuant to § 257.105(i)(1);

(ii) The owner or operator must have provided notification to the department by January 19, 2016, of the intent to initiate closure of the inactive CCR surface impoundment pursuant to § 257.106(i)(1); and

(iii) The owner or operator must have placed on its CCR Web site by January 19, 2016, the notification of intent to initiate closure of the inactive CCR surface impoundment pursuant to § 257.107(i)(1).

(2) Reserved.

(3) Design criteria. The owner or operator of the inactive CCR surface impoundment must:

(i) No later than the effective date of the Kansas CCR Standards, complete the documentation of liner type as set forth by § 257.71(a) and (b).

(ii) No later than the effective date of the Kansas CCR Standards, place on or immediately adjacent to the CCR unit the permanent identification marker as set forth by § 257.73(a)(1).

(iii) No later than October 16, 2018, or by the effective date of the Kansas CCR Standards, whichever is later, prepare and maintain an Emergency Action Plan as set forth by § 257.73(a)(3).

(iv) No later than the effective date of the Kansas CCR Standards, compile a history of construction as set forth by § 257.73(b) and (c).

(v) No later than the effective date of the Kansas CCR Standards, complete the initial hazard potential classification, structural stability, and safety factor assessments as set forth by § 257.73(a)(2), (b), (d), (e), and (f).

(4) Operating criteria. The owner or operator of the inactive CCR surface impoundment must:

(i) No later than the effective date of the Kansas CCR Standards, prepare the initial CCR fugitive dust control plan as set forth in § 257.80(b).

(ii) No later than the effective date of the Kansas CCR Standards, prepare the initial inflow design flood control system plan as set forth in § 257.82(c).

(iii) No later than the effective date of the Kansas CCR Standards, initiate the inspections by a qualified person as set forth by § 257.83(a).

(iv) No later than the effective date of the Kansas CCR Standards, complete the initial annual inspection by a qualified professional engineer as set forth by § 257.83(b).

(5) Groundwater monitoring and corrective action. The owner or operator of the inactive CCR surface impoundment must:

(i) No later than April 17, 2019, or by the effective date of the Kansas CCR Standards, whichever is later, comply with groundwater monitoring requirements set forth in §§ 257.90(b) and 257.94(b); and

(ii) No later than August 1, 2019, or by the effective date of the Kansas CCR Standards, whichever is later, prepare the initial groundwater monitoring and corrective action report as set forth in § 257.90(e).

(6) Closure and post-closure care. The owner or operator of the inactive CCR surface impoundment must:

(i) No later than the effective date of the Kansas CCR Standards, prepare an initial written closure plan as set forth in § 257.102(b); and

(ii) No later than the effective date of the Kansas CCR Standards, prepare an initial written post-closure care plan as set forth in § 257.104(d).

KCS 257.101 Closure or retrofit of CCR units.

(a) The owner or operator of an existing unlined CCR surface impoundment, as determined under § 257.71(a), is subject to the requirements of paragraph (a)(1) of this section.

(1) Except as provided by paragraph (a)(3) of this section or KCS 28-29-751, if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in appendix IV are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for such CCR unit, within six months of making such determination, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator of the existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of § 257.102.

(2) An owner or operator of an existing unlined CCR surface impoundment that closes in accordance with paragraph (a)(1) of this section must include a statement in the notification required under § 257.102(g) or (k)(5) that the CCR surface impoundment is closing or retrofitting under the requirements of paragraph (a)(1) of this section.

(3) The timeframe specified in paragraph (a)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.

(4) At any time after the initiation of closure under paragraph (a)(1) of this section, the owner or operator may cease closure activities and initiate a retrofit of the CCR unit in accordance with the requirements of § 257.102(k).

(b) The owner or operator of an existing CCR surface impoundment is subject to the requirements of paragraph (b)(1) of this section.

(1) Except as provided by paragraph (b)(4) of this section or by KCS 28-29-751, within six months of determining that an existing CCR surface impoundment has not demonstrated compliance with any location standard specified in §§ 257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102. The compliance date shall be the effective date of the Kansas CCR Standards, if the effective date of the Kansas CCR Standards is later than the six month deadline.

(2) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by § 257.73(e) by the deadlines specified in § 257.73(f)(1) through (3) or failing to document that the calculated factors of safety for the existing CCR surface impoundment achieve the minimum safety factors specified in § 257.73(e)(1)(i) through (iv), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102. The compliance date shall be the effective date of the Kansas CCR Standards, if the effective date of the Kansas CCR Standards is later than the six month deadline.

(3) An owner or operator of an existing CCR surface impoundment that closes in accordance with paragraphs (b)(1) or (2) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraphs (b)(1) or (2) of this section.

(4) The timeframe specified in paragraph (b)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.

(c) The owner or operator of a new CCR surface impoundment is subject to the requirements of paragraph (c)(1) of this section.

(1) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by § 257.74(e) by the deadlines specified in § 257.74(f)(1) through (3) or failing to document that the calculated factors of safety for the new CCR surface impoundment achieve the minimum safety factors specified in § 257.74(e)(1)(i) through (v), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of § 257.102.

(2) An owner or operator of an new CCR surface impoundment that closes in accordance with paragraph (c)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR surface impoundment is closing under the requirements of paragraph (c)(1) of this section.

(d) The owner or operator of an existing CCR landfill is subject to the requirements of paragraph (d)(1) of this section.

(1) Except as provided by paragraph (d)(3) of this section, within six months of determining that an existing CCR landfill has not demonstrated compliance with the location restriction for unstable areas specified in § 257.64(a), the owner or operator of the CCR unit must cease placing CCR and non-CCR waste streams into such CCR landfill and close the CCR unit in accordance with the requirements of § 257.102. The compliance date shall be the effective date of the Kansas CCR Standards, if the effective date of the Kansas CCR Standards is later than the six month deadline.

(2) An owner or operator of an existing CCR landfill that closes in accordance with paragraph (d)(1) of this section must include a statement in the notification required under § 257.102(g) that the CCR landfill is closing under the requirements of paragraph (d)(1) of this section.

(3) The timeframe specified in paragraph (d)(1) of this section does not apply if the owner or operator complies with the alternative closure procedures specified in § 257.103.

KCS 257.102 Criteria for conducting the closure or retrofit of CCR units.

(a) Closure of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described in paragraphs (b) through (j) of this section. Retrofit of a CCR surface impoundment must be completed in accordance with the requirements in paragraph (k) of this section.

(b) ***Written closure plan.*** **(1)** ***Content of the plan.*** The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices. The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(i) through (vi) of this section.

(i) A narrative description of how the CCR unit will be closed in accordance with this section.

(ii) If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.

(iii) If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.

(iv) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(v) An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this section at any time during the CCR unit's active life.

(vi) A schedule for completing all activities necessary to satisfy the closure criteria in this section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this section.

(2) *Timeframes for preparing the initial written closure plan*—(i) *Existing CCR landfills and existing CCR surface impoundments.* No later than the effective date of the Kansas CCR Standards, the owner or operator of the CCR unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(ii) *New CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit.* No later than the date of the initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(iii) The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

(3) *Amendment of a written closure plan.* (i) The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this section at any time.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or

(B) Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.

(iii) The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.

(4) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written closure plan meets the requirements of this section.

(c) *Closure by removal of CCR.* An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit are at or below background concentrations and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to § 257.95(h) for constituents listed in appendix IV. The owner or operator may request to complete closure by removal of CCR under alternative standards in accordance with KCS 28-29-753.

(d) *Closure performance standard when leaving CCR in place.* (1) The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(i) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

(iii) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

(iv) Minimize the need for further maintenance of the CCR unit; and

(v) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

(2) *Drainage and stabilization of CCR surface impoundments.* The owner or operator of a CCR surface impoundment or any lateral expansion of a CCR surface impoundment must meet the requirements of paragraphs (d)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (d)(3) of this section.

(i) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(ii) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) *Final cover system.* If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.

(i) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1 x 10^{-5} cm/sec, whichever is less.

(B) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (d)(3)(ii)(A) through (D) of this section, except as provided in KCS 28-29-754. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.

(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.

(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(iii) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this section.

(4) The owner or operator of a CCR unit that is closing pursuant to KCS 257.101 may place CCR waste or non-CCR waste in the unit as part of closure activities in accordance with KCS 28-29-752.

(e) ***Initiation of closure activities.*** Except as provided for in paragraph (e)(4) of this section and § 257.103, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this section.

(1) The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:

(i) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or

(ii) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

(2)(i) Except as provided by paragraph (e)(2)(ii) of this section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

(ii) Notwithstanding paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation to the department that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use and the extension has been approved by the secretary in accordance with KCS 28-29-770 . The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(ii)(A) and (B) of this section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate to the secretary that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use and the extension has been approved by the secretary in accordance with KCS 28-29-77*0* . The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(5) prior to the end of any two-year period.

(A) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

(B) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will

resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(ii)(B)(*1*) through (*4*) of this section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.

(*1*) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.

(*2*) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (*e.g.,* CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.

(*3*) The CCR unit is dedicated to an operating coal-fired boiler (*i.e.,* CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.

(*4*) The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.

(iii) In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(ii) of this section the following statement signed by the owner or operator or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) For purposes of the Kansas CCR Standards, closure of the CCR unit has commenced if the owner or operator has ceased placing waste and completes any of the following actions or activities:

(i) Taken any steps necessary to implement the written closure plan required by paragraph (b) of this section;

(ii) Submitted a completed application for any required state or agency permit or permit modification; or

(iii) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the closure of a CCR unit.

(4) The timeframes specified in paragraphs (e)(1) and (2) of this section do not apply to any of the following owners or operators:

(i) Reserved;

(ii) An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by § 257.101(a);

(iii) An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by § 257.101(b);

(iv) An owner or operator of a new CCR surface impoundment closing the CCR unit as required by § 257.101(c); or

(v) An owner or operator of an existing CCR landfill closing the CCR unit as required by § 257.101(d).

(f) ***Completion of closure activities.*** (1) Except as provided for in paragraph (f)(2) of this section, the owner or operator must complete closure of the CCR unit:

(i) For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.

(ii) For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.

(2)(i) *Extensions of closure timeframes.* The timeframes for completing closure of a CCR unit specified under paragraphs (f)(1) of this section may be extended if the owner or operator can demonstrate to the secretary that it was not feasible to complete closure of the CCR unit within the required timeframes due to factors beyond the owner or operator's control and the extension has been approved by the secretary in accordance with KCS 28-29-770. If the owner or operator is seeking a time extension beyond the time specified in the written closure plan as required by paragraph (b)(1) of this section, the demonstration must include a narrative discussion providing the basis for additional time

beyond that specified in the closure plan. The owner or operator must place each completed demonstration**,** if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(6) prior to the end of any previous extension period. Factors that may support such a demonstration include:

(A) Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;

(B) Time required to dewater a surface impoundment due to the volume of CCR contained in the CCR unit or the characteristics of the CCR in the unit;

(C) The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or

(D) Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.

(ii) *Maximum time extensions.* (A) CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.

(B) CCR surface impoundments larger than 40 acres may extend the timeframe to complete closure of the CCR unit multiple times, in two-year increments. For each two-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of five two-year extensions may be obtained for any CCR surface impoundment.

(C) CCR landfills may extend the timeframe to complete closure of the CCR unit multiple times, in one-year increments. For each one-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of two one-year extensions may be obtained for any CCR landfill.

(iii) In order to obtain additional time extension(s) to complete closure of a CCR unit beyond the times provided by paragraph (f)(1) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (f)(2)(i) of this section the following statement signed by the owner or operator or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in paragraph (b) of this section and the requirements of article 29, article 34, and the Kansas CCR Standards .

(g) No later than the date the owner or operator initiates closure of a CCR unit, the owner or operator must prepare a notification of intent to close a CCR unit. The notification must include the certification by a qualified professional engineer for the design of the final cover system as required by § 257.102(d)(3)(iii), if applicable. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(7).

(h) Within 30 days of completion of closure of the CCR unit, the owner or operator must prepare a notification of closure of a CCR unit. The notification must include the certification by a qualified professional engineer as required by § 257.102(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(8) and has been submitted to the department.

(i) ***Deed notations.*** (1) Except as provided by paragraph (i)(4) of this section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during a title search. The deed notation or other instrument shall be in a format provided by the department and shall comply with the requirements of K.A.R. 28-29-20.

(2) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(i) The land has been used as a CCR unit; and

(ii) Its use is restricted under the post-closure care requirements as provided by § 257.104(d)(1)(iii).

(3) Within 30 days of recording a notation on the deed to the property, the owner or operator must prepare a notification stating that the notation has been recorded. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(9).

(4) An owner or operator that closes a CCR unit in accordance with paragraph (c) of this section is not subject to the requirements of paragraphs (i)(1) through (3) of this section, except a deed notation may be required by the secretary, if the secretary determines that the deed notation in necessary to protect human health and safety and the environment.

(j) The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in § 257.105(i), the closure notification requirements specified in § 257.106(i), and the closure Internet requirements specified in § 257.107(i).

(k) Criteria to retrofit an existing CCR surface impoundment. (1) To retrofit an existing CCR surface impoundment, the owner or operator must:

(i) First remove all CCR, including any contaminated soils and sediments from the CCR unit; and

(ii) Comply with the requirements in § 257.72.

(iii) A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of the Kansas CCR Standards, including the requirement to conduct any necessary corrective action.

(2) *Written retrofit plan*—(i) *Content of the plan.* The owner or operator must prepare a written retrofit plan that describes the steps necessary to retrofit the CCR unit consistent with recognized and generally accepted good engineering practices. The written retrofit plan must include, at a minimum, all of the following information:

(A) A narrative description of the specific measures that will be taken to retrofit the CCR unit in accordance with this section.

(B) A description of the procedures to remove all CCR and contaminated soils and sediments from the CCR unit. (C) An estimate of the maximum amount of CCR that will be removed as part of the retrofit operation.

(D) An estimate of the largest area of the CCR unit that will be affected by the retrofit operation.

(E) A schedule for completing all activities necessary to satisfy the retrofit criteria in this section, including an estimate of the year in which retrofit activities of the CCR unit will be completed.

(ii) *Timeframes for preparing the initial written retrofit plan.* (A) No later than 60 days prior to date of initiating retrofit activities, the owner or operator must prepare an initial written retrofit plan consistent with the requirements specified in paragraph (k)(2) of this section. For purposes of the Kansas CCR Standards, initiation of retrofit activities has commenced if the owner or operator has ceased placing waste in the unit and completes any of the following actions or activities:

(*1*) Taken any steps necessary to implement the written retrofit plan;

(*2*) Submitted a completed application for any required state or agency permit or permit modification; or

(*3*) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the retrofit of a CCR unit.

(B) The owner or operator has completed the written retrofit plan when the plan, including the certification required by paragraph (k)(2)(iv) of this section, has been placed in the facility's operating record as required by § 257.105(j)(1).

(iii) *Amendment of a written retrofit plan.* (A) The owner or operator may amend the initial or any subsequent written retrofit plan at any time.

(B) The owner or operator must amend the written retrofit plan whenever:

(*1*) There is a change in the operation of the CCR unit that would substantially affect the written retrofit plan in effect; or

(*2*) Before or after retrofit activities have commenced, unanticipated events necessitate a revision of the written retrofit plan.

(C) The owner or operator must amend the retrofit plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the revision of an existing written retrofit plan. If a written retrofit plan is revised after retrofit activities have commenced for a CCR unit, the owner or operator must amend the current retrofit plan no later than 30 days following the triggering event.

(iv) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the activities outlined in the written retrofit plan, including any amendment of the plan, meet the requirements of this section.

(3) *Deadline for completion of activities related to the retrofit of a CCR unit.* Any CCR surface impoundment that is being retrofitted must complete all retrofit activities within the same time frames and

procedures specified for the closure of a CCR surface impoundment in § 257.102(f) or, where applicable, § 257.103.

(4) Upon completion, the owner or operator must obtain a certification from a qualified professional engineer verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in paragraph (k)(2) of this section and the requirements of article 29***,*** article 34, and the Kansas CCR Standards.

(5) No later than the date the owner or operator initiates the retrofit of a CCR unit, the owner or operator must prepare a notification of intent to retrofit a CCR unit. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(j)(5).

(6) Within 30 days of completing the retrofit activities specified in paragraph (k)(1) of this section, the owner or operator must prepare a notification of completion of retrofit activities. The notification must include the certification by a qualified professional engineer as required by paragraph (k)(4) of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(j)(6) and has been submitted to the department. The unit may be returned to use only after the retrofit has been approved by the secretary in accordance with KCS 28-29-770.

(7) At any time after the initiation of a CCR unit retrofit, the owner or operator may cease the retrofit and initiate closure of the CCR unit in accordance with the requirements of § 257.102.

(8) The owner or operator of the CCR unit must comply with the retrofit recordkeeping requirements specified in § 257.105(j), the retrofit notification requirements specified in § 257.106(j), and the retrofit Internet requirements specified in § 257.107(j).

KCS 257.103 Alternative closure requirements.

The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to § 257.101(a), (b)(1), or (d) may continue to receive CCR and/or non-CCR wastestreams in the unit provided the owner or operator meets the requirements of either paragraph (a) or (b) of this section or the requirements of KCS 28-29-755. The owner or operator of the unit may continue to place waste in the unit only if the continued placement of waste is approved by the secretary in accordance with KCS 28-29-770.

(a)(1) No alternative CCR disposal capacity. Notwithstanding the provisions of § 257.101(a), (b)(1), or (d), a CCR unit may continue to receive CCR if the owner or operator of the CCR unit certifies that the CCR must continue to be managed in that CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph (a)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;

(ii) The owner or operator has made, and continues to make, efforts to obtain additional capacity. Qualification under this subsection lasts only as long as no alternative capacity is available. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible;

(iii) The owner or operator must remain in compliance with all other requirements of the Kansas CCR Standards, including the requirement to conduct any necessary corrective action; and

(iv) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the development of alternative CCR disposal capacity.

(2) Once alternative capacity is available, the CCR unit must cease receiving CCR and initiate closure following the timeframes in § 257.102(e) and (f).

(3) If no alternative capacity is identified within five years after the initial certification, the CCR unit must cease receiving CCR and close in accordance with the timeframes in § 257.102(e) and (f).

(b)(1) ***Permanent cessation of a coalfired boiler(s) by a date certain.*** Notwithstanding the provisions of § 257.101(a), (b)(1), and (d), a CCR unit may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coalfired boilers within the timeframes specified in paragraphs (b)(2) through (4) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both onsite and off-site of the facility. To qualify under this paragraph (b)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section.

(ii) The owner or operator must remain in compliance with all other requirements of the Kansas CCR Standards, including the requirement to conduct any necessary corrective action; and

(iii) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the closure of the coal-fired boiler.

(2) For a CCR surface impoundment that is 40 acres or smaller, the coal-fired boiler must cease operation and the CCR surface impoundment must have completed closure no later than October 17, 2023.

(3) For a CCR surface impoundment that is larger than 40 acres, the coalfired boiler must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.

(4) For a CCR landfill, the coal-fired boiler must cease operation, and the CCR landfill must complete closure no later than April 19, 2021.

(c) Required notices and progress reports. An owner or operator of a CCR unit that closes in accordance with paragraphs (a) or (b) of this section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this section.

(1) Within six months of becoming subject to closure pursuant to § 257.101(a), (b)(1), or (d), the owner or operator must prepare and place in the facility's operating record a notification of intent to comply with the alternative closure requirements of this section. The notification must describe why the CCR unit qualifies for the alternative closure provisions under either paragraph (a) or (b) of this section, in addition to providing the documentation and certifications required by paragraph (a) or (b) of this section.

(2) The owner or operator must prepare the periodic progress reports required by paragraphs (a)(1)(iv) or (b)(1)(iii), in addition to describing any problems encountered and a description of the actions taken to resolve the problems. The annual progress reports must be completed according to the following schedule:

(i) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to comply with the alternative closure requirements required by paragraph (c)(1) of this section, or by the effective date of the Kansas CCR Standards, whichever is later.

(ii) The second annual progress report must be prepared no later than 12 months after completing the first annual progress report, or by the effective date of the Kansas CCR Standards, whichever is later. Additional annual progress reports must be prepared within 12 months of completing the previous annual progress report.

(iii) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this section when the reports are placed in the facility's operating record as required by § 257.105(i)(10).

(3) An owner or operator of a CCR unit must also prepare the notification of intent to close a CCR unit as required by § 257.102(g).

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).

KCS 257.104 Post-closure care requirements.

(a) Applicability. (1) Except as provided by paragraph (a)(2) of this section, § 257.104 applies to the owners or operators of CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units that are subject to the closure criteria under § 257.102.

(2) An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by § 257.102(c) or KCS 28-29-753 is not subject to the post-closure care criteria under this section.

(b) Post-closure care maintenance requirements. Following closure of the CCR unit, the owner or operator must conduct post-closure care for the CCR unit, which must consist of at least the following, subject to modification in accordance with KCS 28-29-756:

(1) Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(2) If the CCR unit is subject to the design criteria under § 257.70, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of § 257.70 and KCS 28-29-721; and

(3) Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98, article 29, article 34, and the Kansas CCR Standards.

(c) Post-closure care period.

(1) Except as provided by paragraph (c)(2) of this section or KCS 28-29-756, the owner or operator of the CCR unit must conduct post-closure care for 30 years.

(2) If at the end of the post-closure care period the owner or operator of the CCR unit is operating under assessment monitoring in accordance with § 257.95, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with § 257.95.

(d) *Written post-closure plan*—(1) *Content of the plan.* The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.

(i) A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed;

(ii) The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and

(iii) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in the Kansas CCR Standards. Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates to the secretary that disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, will not increase the potential threat to human health or the environment and the demonstration has been approved by the secretary in accordance with KCS 28-29-770 . The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the department that the demonstration has been placed in the operating record and on the owner's or operator's publicly accessible Internet site.

(2) *Deadline to prepare the initial written post-closure plan*—(i) *Existing CCR landfills and existing CCR surface impoundments.* No later than the effective date of the Kansas CCR Standards, the owner or operator of the CCR unit must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section.

(ii) *New CCR landfills, new CCR surface impoundments, and any lateral expansion of a CCR unit.* No later than the date of the initial receipt of CCR in the CCR unit, or by the effective date of the Kansas CCR Standards, whichever is later, the owner or operator must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section.

(iii) The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

(3) *Amendment of a written post-closure plan.* (i) The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this section at any time.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(B) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

(iii) The owner or operator must amend the written post-closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.

(4) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.

(e) *Notification of completion of post-closure care period.* No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed and submit the certification to the department. The notification must include the certification by a qualified professional engineer verifying

that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this section and the requirements article 29, article 34, and the Kansas CCR Standards. A groundwater scientist may provide certification that the groundwater monitoring requirements specified in the written postclosure plan have been met. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(13). The postclosure care period shall be considered complete only upon approval by the secretary in accordance with KCS 28-29-770.

(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).

Recordkeeping, Notification, and Posting of Information to the Internet

KCS 257.105 Recordkeeping requirements.

(a) Each owner or operator of a CCR unit subject to the requirements of the Kansas CCR Standards must maintain files of all information required by this section in a written operating record at their facility.

(b) Unless specified otherwise, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.

(c) An owner or operator of more than one CCR unit subject to the provisions of the Kansas CCR Standards may comply with the requirements of this section in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.

(d) The owner or operator of a CCR unit must submit to the department any demonstration or documentation required by the Kansas CCR Standards, if requested by the secretary in accordance with KCS 28-29-762.

(e) ***Location restrictions.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the demonstrations documenting whether or not the CCR unit is in compliance with the requirements under §§ 257.60(a), 257.61(a), 257.62(a), 257.63(a), and 257.64(a), as it becomes available, in the facility's operating record.

(f) ***Design criteria.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information, as it becomes available, in the facility's operating record:

(1) The design and construction certifications as required by § 257.70(e) and (f).

(2) The documentation of liner type as required by § 257.71(a).

(3) The design and construction certifications as required by § 257.72(c) and (d).

(4) Documentation prepared by the owner or operator stating that the permanent identification marker was installed as required by §§ 257.73(a)(1) and 257.74(a)(1).

(5) The initial and periodic hazard potential classification assessments as required by §§ 257.73(a)(2) and 257.74(a)(2).

(6) The emergency action plan (EAP), and any amendment of the EAP, as required by §§ 257.73(a)(3) and 257.74(a)(3), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(7) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders as required by §§ 257.73(a)(3)(i)(E) and 257.74(a)(3)(i)(E).

(8) Documentation prepared by the owner or operator recording all activations of the emergency action plan as required by §§ 257.73(a)(3)(v) and 257.74(a)(3)(v).

(9) The history of construction, and any revisions of it, as required by § 257.73(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.

(10) The initial and periodic structural stability assessments as required by §§ 257.73(d) and 257.74(d).

(11) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.73(d)(2) and 257.74(d)(2).

(12) The initial and periodic safety factor assessments as required by §§ 257.73(e) and 257.74(e).

(13) The design and construction plans, and any revisions of it, as required by § 257.74(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with § 257.102.

(g) *Operating criteria.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information, as it becomes available, in the facility's operating record:

(1) The CCR fugitive dust control plan, and any subsequent amendment of the plan, required by § 257.80(b), except that only the most recent control plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(2) The annual CCR fugitive dust control report required by § 257.80(c).

(3) The initial and periodic run-on and run-off control system plans as required by § 257.81(c).

(4) The initial and periodic inflow design flood control system plan as required by § 257.82(c).

(5) Documentation recording the results of each inspection and instrumentation monitoring by a qualified person as required by § 257.83(a).

(6) The periodic inspection report as required by § 257.83(b)(2).

(7) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by §§ 257.83(b)(5) and 257.84(b)(5).

(8) Documentation recording the results of the weekly inspection by a qualified person as required by § 257.84(a).

(9) The periodic inspection report as required by § 257.84(b)(2).

(h) *Groundwater monitoring and corrective action.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information, as it becomes available, in the facility's operating record:

(1) The annual groundwater monitoring and corrective action report as required by § 257.90(e).

(2) Documentation of the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices as required by § 257.91(e)(1).

(3) The groundwater monitoring system certification as required by § 257.91(f).

(4) The selection of a statistical method certification as required by § 257.93(f)(6).

(5) Within 30 days of establishing an assessment monitoring program, the notification as required by § 257.94(e)(3).

(6) The results of appendices III and IV constituent concentrations as required by § 257.95(d)(1).

(7) Within 30 days of returning to a detection monitoring program, the notification as required by § 257.95(e).

(8) Within 30 days of detecting one or more constituents in appendix IV at statistically significant levels above the groundwater protection standard, the notifications as required by § 257.95(g).

(9) Within 30 days of initiating the assessment of corrective measures requirements, the notification as required by § 257.95(g)(5).

(10) The completed assessment of corrective measures as required by § 257.96(d).

(11) Documentation prepared by the owner or operator recording the public meeting for the corrective measures assessment as required by § 257.96(e).

(12) The semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report as required by § 257.97(a), except that the selection of remedy report must be maintained until the remedy has been completed.

(13) Within 30 days of completing the remedy, the notification as required by § 257.98(e).

(14) The demonstration, including long-term performance data, supporting the suspension of groundwater monitoring requirements as required by § 257.90(g).

(15) The notification of discovery of a non-groundwater release as required by § 257.99(c)(1).

(16) The report documenting the completion of the corrective action as required by § 257.99(c)(3).

(i) *Closure and post-closure care.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information, as it becomes available, in the facility's operating record:

(1) The notification of intent to initiate closure of the CCR unit as required by § 257.100(c)(1).

(2) The annual progress reports of closure implementation as required by § 257.100(c)(2)(i) and (ii).

(3) The notification of closure completion as required by § 257.100(c)(3).

(4) The written closure plan, and any amendment of the plan, as required by § 257.102(b), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(5) The written demonstration(s), including the certification required by § 257.102(e)(2)(iii), for a time extension for initiating closure as required by § 257.102(e)(2)(ii).

(6) The written demonstration(s), including the certification required by § 257.102(f)(2)(iii), for a time extension for completing closure as required by § 257.102(f)(2)(i).

(7) The notification of intent to close a CCR unit as required by § 257.102(g).

(8) The notification of completion of closure of a CCR unit as required by § 257.102(h).

(9) The notification recording a notation on the deed as required by § 257.102(i).

(10) The notification of intent to comply with the alternative closure requirements as required by § 257.103(c)(1).

(11) The annual progress reports under the alternative closure requirements as required by § 257.103(c)(2).

(12) The written post-closure plan, and any amendment of the plan, as required by § 257.104(d), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(13) The notification of completion of post-closure care period as required by § 257.104(e).

(14) The demonstration, including long-term performance data supporting the reduced post-closure care period as required by § 257.104(c)(3).

(j) *Retrofit criteria.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information, as it becomes available, in the facility's operating record:

(1) The written retrofit plan, and any amendment of the plan, as required by § 257.102(k)(2), except that only the most recent retrofit plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this section.

(2) The notification of intent that the retrofit activities will proceed in accordance with the alternative procedures in § 257.103.

(3) The annual progress reports required under the alternative requirements as required by § 257.103.

(4) The written demonstration(s), including the certification in § 257.102(f)(2)(iii), for a time extension for completing retrofit activities as required by § 257.102(k)(3).

(5) The notification of intent to initiate retrofit of a CCR unit as required by § 257.102(k)(5).

(6) The notification of completion of retrofit activities as required by § 257.102(k)(6).

KCS 257.106 Notification requirements.

(a) The notifications required under paragraphs (e) through (i) of this section must be sent to the department before the close of business on the day the notification is required to be completed. For purposes of this section, *before the close of business* means the notification must be postmarked or sent by electronic mail (email). If a notification deadline falls on a weekend or state holiday, the notification deadline is automatically extended to the next business day. If the owner or operator submits a document to the department in accordance with the Kansas CCR Standards, the owner or operator is not required to provide notification to the secretary that the document has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(b) Reserved.

(c) Notifications may be combined as long as the deadline requirement for each notification is met.

(d) Unless otherwise required in this section or the Kansas CCR Standards, the notifications specified in this section must be sent to the department within 30 days of placing in the operating record the information required by § 257.105.

(e) *Location restrictions.* The owner or operator of a CCR unit subject to the requirements of the Kansas CCR Standards must notify the department that each demonstration specified under § 257.105(e) has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(f) *Design criteria.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must notify the department when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Within 60 days of commencing construction of a new CCR unit, provide notification of the availability of the design certification specified under § 257.105(f)(1) or (3). If the owner or operator of the CCR unit elects to install an alternative composite liner, the owner or operator must also submit to the department a copy of the alternative composite liner design.

(2) No later than the date of initial receipt of CCR by a new CCR unit , or by the effective date of the Kansas CCR Standards, whichever is later, provide notification of the availability of the construction certification specified under § 257.105(f)(1) or (3).

(3) Provide notification of the availability of the documentation of liner type specified under § 257.105(f)(2).

(4) Provide notification of the availability of the initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).

(5) Provide notification of the availability of emergency action plan (EAP), and any revisions of the EAP, specified under § 257.105(f)(6).

(6) Provide notification of the availability of documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).

(7) Provide notification of documentation prepared by the owner or operator recording all activations of the emergency action plan specified under § 257.105(f)(8).

(8) Provide notification of the availability of the history of construction, and any revision of it, specified under § 257.105(f)(9).

(9) Provide notification of the availability of the initial and periodic structural stability assessments specified under § 257.105(f)(10).

(10) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(f)(11).

(11) Provide notification of the availability of the initial and periodic safety factor assessments specified under § 257.105(f)(12).

(12) Provide notification of the availability of the design and construction plans, and any revision of them, specified under § 257.105(f)(13).

(g) ***Operating criteria.*** The owner or operator of a CCR unit subject to this the Kansas CCR Standards must notify the department when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1).

(2) Provide notification of the availability of the annual CCR fugitive dust control report specified under § 257.105(g)(2).

(3) Provide notification of the availability of the initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).

(4) Provide notification of the availability of the initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).

(5) Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(6).

(6) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).

(7) Provide notification of the availability of the periodic inspection reports specified under § 257.105(g)(9).

(h) ***Groundwater monitoring and corrective action.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must notify the department when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the annual groundwater monitoring and corrective action report specified under § 257.105(h)(1).

(2) Provide notification of the availability of the groundwater monitoring system certification specified under § 257.105(h)(3).

(3) Provide notification of the availability of the selection of a statistical method certification specified under § 257.105(h)(4).

(4) Provide notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).

(5) Provide notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).

(6) Provide notification that one or more constituents in appendix IV have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).

(7) Provide notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).

(8) Provide notification of the availability of assessment of corrective measures specified under § 257.105(h)(10).

(9) Provide notification of the availability of the semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report specified under § 257.105(h)(12).

(10) Provide notification of the completion of the remedy specified under § 257.105(h)(13).

(11) Provide the demonstration supporting the suspension of groundwater monitoring requirements specified under § 257.105(h)(14).

(12) Provide notification of discovery of a non-groundwater release specified under § 257.105(h)(15).

(13) Provide notification of the availability of the report documenting the completion of the corrective action specified under § 257.105(h)(16).

(i) *Closure and post-closure care*. The owner or operator of a CCR unit subject to the Kansas CCR Standards must notify the department when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the intent to initiate closure of the CCR unit specified under § 257.105(i)(1).

(2) Provide notification of the availability of the annual progress reports of closure implementation specified under § 257.105(i)(2).

(3) Provide notification of closure completion specified under § 257.105(i)(3).

(4) Provide notification of the availability of the written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).

(5) Provide notification of the availability of the demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).

(6) Provide notification of the availability of the demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).

(7) Provide notification of intent to close a CCR unit specified under § 257.105(i)(7).

(8) Provide notification of completion of closure of a CCR unit specified under § 257.105(i)(8).

(9) Provide notification of the deed notation as required by § 257.105(i)(9).

(10) Provide notification of intent to comply with the alternative closure requirements specified under § 257.105(i)(10).

(11) Provide notification of the availability of The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).

(12) Provide notification of the availability of the written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).

(13) Provide notification of completion of post-closure care specified under § 257.105(i)(13).

(14) Provide the demonstration supporting the reduced post-closure care period specified under § 257.105(i)(14).

(j) *Retrofit criteria*. The owner or operator of a CCR unit subject to the Kansas CCR Standards must notify the department when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the availability of the written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).

(2) Provide notification of intent to comply with the alternative retrofit requirements specified under § 257.105(j)(2).

(3) Provide notification of the availability of The annual progress reports under the alternative retrofit requirements as required by § 257.105(j)(3).

(4) Provide notification of the availability of the demonstration(s) for a time extension for completing retrofit activities specified under § 257.105(j)(4).

(5) Provide notification of intent to initiate retrofit of a CCR unit specified under § 257.105(j)(5).

(6) Provide notification of completion of retrofit activities specified under § 257.105(j)(6).

KCS 257.107 Publicly accessible Internet site requirements.

(a) Each owner or operator of a CCR unit subject to the requirements of the Kansas CCR Standards must maintain a publicly accessible Internet site (CCR Web site) containing the information specified in this section. The owner or operator's Web site must be titled ''CCR Rule Compliance Data and Information.''

(b) An owner or operator of more than one CCR unit subject to the provisions of the Kansas CCR Standards may comply with the requirements of this section by using the same Internet site for multiple CCR units provided the CCR Web site clearly delineates information by the name or identification number of each unit.

(c) Unless otherwise required in this section, the information required to be posted to the CCR Web site must be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site.

(d) Unless otherwise required in this section, the information must be posted to the CCR Web site within 30 days of placing the pertinent information required by § 257.105 in the operating record. Any deadline for posting information to the CCR web site that falls before the effective date of the Kansas CCR Standards shall be replaced with the effective date of the Kansas CCR Standards.

(e) ***Location restrictions.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place each demonstration specified under § 257.105(e) on the owner or operator's CCR Web site.

(f) Design criteria. The owner or operator of a CCR unit subject tothe Kansas CCR Standards must place the following information on the owner or operator's CCR Web site:

(1) Within 60 days of commencing construction of a new unit, the design certification specified under § 257.105(f)(1) or (3).

(2) No later than the date of initial receipt of CCR by a new CCR unit , or by the effective date of the Kansas CCR Standards, whichever is later, the construction certification specified under § 257.105(f)(1) or (3).

(3) The documentation of liner type specified under § 257.105(f)(2).

(4) The initial and periodic hazard potential classification assessments specified under § 257.105(f)(5).

(5) The emergency action plan (EAP) specified under § 257.105(f)(6), except that only the most recent EAP must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph(c) of this section.

(6) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under § 257.105(f)(7).

(7) Documentation prepared by the owner or operator recording any activation of the emergency action plan specified under § 257.105(f)(8).

(8) The history of construction, and any revisions of it, specified under § 257.105(f)(9).

(9) The initial and periodic structural stability assessments specified under § 257.105(f)(10).

(10) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(f)(11).

(11) The initial and periodic safety factor assessments specified under § 257.105(f)(12).

(12) The design and construction plans, and any revisions of them, specified under § 257.105(f)(13).

(g) ***Operating criteria.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information on the owner or operator's CCR Web site:

(1) The CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under § 257.105(g)(1) except that only the most recent plan must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this section.

(2) The annual CCR fugitive dust control report specified under § 257.105(g)(2).

(3) The initial and periodic run-on and run-off control system plans specified under § 257.105(g)(3).

(4) The initial and periodic inflow design flood control system plans specified under § 257.105(g)(4).

(5) The periodic inspection reports specified under § 257.105(g)(6).

(6) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under § 257.105(g)(7).

(7) The periodic inspection reports specified under § 257.105(g)(9).

(h) ***Groundwater monitoring and corrective action.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information on the owner or operator's CCR Web site:

(1) The annual groundwater monitoring and corrective action report specified under § 257.105(h)(1).

(2) The groundwater monitoring system certification specified under § 257.105(h)(3).

(3) The selection of a statistical method certification specified under § 257.105(h)(4).

(4) The notification that an assessment monitoring programs has been established specified under § 257.105(h)(5).

(5) The notification that the CCR unit is returning to a detection monitoring program specified under § 257.105(h)(7).

(6) The notification that one or more constituents in appendix IV have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under § 257.105(h)(8).

(7) The notification that an assessment of corrective measures has been initiated specified under § 257.105(h)(9).

(8) The assessment of corrective measures specified under § 257.105(h)(10).

(9) The semiannual reports describing the progress in selecting and designing remedy and the selection of remedy report specified under § 257.105(h)(12), except that the selection of the remedy report must be maintained until the remedy has been completed.

(10) The notification that the remedy has been completed specified under § 257.105(h)(13).

(11) The demonstration supporting the suspension of groundwater monitoring requirements specified under § 257.105(h)(14).

(12) The notification of discovery of a non-groundwater release specified under § 257.105(h)(15).

(13) The report documenting the completion of the corrective action specified under § 257.105(h)(16).

(i) ***Closure and post-closure care.*** The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information on the owner or operator's CCR Web site:

(1) The notification of intent to initiate closure of the CCR unit specified under § 257.105(i)(1).

(2) The annual progress reports of closure implementation specified under § 257.105(i)(2).

(3) The notification of closure completion specified under § 257.105(i)(3).

(4) The written closure plan, and any amendment of the plan, specified under § 257.105(i)(4).

(5) The demonstration(s) for a time extension for initiating closure specified under § 257.105(i)(5).

(6) The demonstration(s) for a time extension for completing closure specified under § 257.105(i)(6).

(7) The notification of intent to close a CCR unit specified under § 257.105(i)(7).

(8) The notification of completion of closure of a CCR unit specified under § 257.105(i)(8).

(9) The notification recording a notation on the deed as required by § 257.105(i)(9).

(10) The notification of intent to comply with the alternative closure requirements as required by § 257.105(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by § 257.105(i)(11).

(12) The written post-closure plan, and any amendment of the plan, specified under § 257.105(i)(12).

(13) The notification of completion of post-closure care specified under § 257.105(i)(13).

(14) The demonstration supporting the reduced post-closure care period specified under § 257.105(i)(14).

(j) ***Retrofit criteria****.* The owner or operator of a CCR unit subject to the Kansas CCR Standards must place the following information on the owner or operator's CCR Web site:

(1) The written retrofit plan, and any amendment of the plan, specified under § 257.105(j)(1).

(2) The notification of intent to comply with the alternative retrofit requirements as required by § 257.105(j)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by § 257.105(j)(3).

(4) The demonstration(s) for a time extension for completing retrofit activities specified under § 257.105(j)(4).

(5) The notification of intent to retrofit a CCR unit specified under § 257.105(j)(5).

(6) The notification of completion of retrofit activities specified under § 257.105(j)(6).

Additional Kansas Standards

General Provisions

KCS 28-29-700. Effective date. The effective date of the Kansas Coal Combustion Residuals Standards, or Kansas CCR Standards (KCS), is the date that the Kansas Coal Combustion Residuals Permitting Program is approved by the United States Environmental Protection Agency.

KCS 28-29-707. Additional state definitions. For the purposes of the Kansas CCR Standards, each of the following terms shall have the meaning specified in this standard:

(a) “Appendix III” shall mean appendix III as found in KCS 28-29-741.

(b) “Appendix IV” shall mean appendix IV as found in KCS 28-29-741.

(c) “Article 29” shall mean article 29 of the Kansas Department of Health and Environment Kansas Administrative Regulations.

(d) “Article 34” shall mean article 34 of chapter 65 of the Kansas Statutes Annotated.

(e) “Kansas CCR Standards” and “KCS” shall mean the Kansas Coal Combustion Residuals Standards.

(f) “Point source” shall have the meaning specified in K.A.R. 28-16-28b.

(g) “Qualified groundwater scientist” shall have the meaning specified in K.A.R. 28-29-3.

(h) “Waters of the state” shall have the meaning specified in K.S.A. 65-161a.

KCS 28-29-708. Beneficial use approvals. Each person that plans to use CCR in a manner that meets the definition of “beneficial use” shall obtain written approval from the secretary before the use occurs, according to the following:

(a) Each of the following uses shall not require written approval by the secretary:

(1) Any encapsulated beneficial use;

(2) beneficial use for roadway or parking area construction or repair; and

(3) beneficial use for storage area surface improvements, including in agricultural settings.

(b) The use may be approved by the secretary if the person that plans to use the CCR demonstrates to the secretary, or the secretary otherwise determines, that the use is protective of public health and safety and the environment.

Design Criteria

KCS 28-29-721. Waiver to design criteria. The owner or operator of any proposed new CCR landfill or proposed lateral expansion of a CCR landfill may submit a request to the department for a waiver to one or more of the design requirements of KCS 257.70(a)(1). The waiver may be granted by the secretary if all of the following conditions are met:

(a) The owner or operator demonstrates to the secretary that the proposed CCR unit design is at least as protective of public health and safety and the environment as the requirements of both of the following:

(1) The liner requirements of one of the following:

(A) 257.70(b); or

(B) 257.70(c); and

(2) the leachate collection and removal system requirements of KCS 257.70(d);

(b) the demonstration is based on site-specific conditions which may include one or more of the following:

(1) The physical and chemical characteristics of the CCR that will be placed in the unit;

(2) annual precipitation;

(3) geology;

(4) depth to groundwater;

(5) distance to receptors; and

(6) any other relevant factors; and

(c) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

Operating Criteria

KCS 28-29-731. Alternative inspection schedules. Alternative inspection schedules may be requested and granted according to the following.

(a) The owner or operator of any CCR unit may submit a request to the department for approval to use an alternative schedule for one or more of the following inspections by a qualified person:

(1) The CCR surface impoundment inspections specified in one or both of the following:

(A) KCS 257.83(a)(1)(i); or

(B) KCS 257.83(a)(1)(ii); or

(2) The CCR landfill inspections specified in KCS 257.84(a)(1)(i).

(b) The request may be granted by the secretary if all of the following conditions are met:

(1) If the unit is a CCR surface impoundment, the unit is classified as one of the following:

(A) An incised surface impoundment; or

(B) a low hazard potential CCR surface impoundment as defined under “hazard potential classification” in KCS 257.53;

(2) the previous year’s annual inspection by a qualified professional engineer, if required, does not identify any deficiencies or concerns; and

(3) the alternative inspection schedule requires inspections by a qualified person at intervals not to exceed the following:

(A) 30 days if no deficiencies or concerns were identified in the previous inspection by a qualified person;

(B) seven days for at least one month if any deficiencies or concerns were identified in the previous inspection by a qualified person; and

(C) seven days for at least one month after a storm event that is greater than a 24-hour, 25-year storm.

(4) Public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

Groundwater Monitoring and Corrective Action

KCS 28-29-741. Constituents for monitoring and maximum contaminant levels.

(a) Constituents for monitoring.

(1) Appendix III - Constituents for Detection Monitoring

Common name
Boron
Calcium
Chloride
Fluoride
pH
Sulfate
Total Dissolved Solids (TDS)

(2) Appendix IV - Constituents for Assessment Monitoring

Common name
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium

Cobalt
Fluoride
Lead
Lithium
Mercury
Molybdenum
Selenium
Thallium
Radium 226 and 228 combined

(b) Maximum contaminant levels.

(1) Inorganic Compounds

Chemical	Maximum contaminant level in milligrams per liter
Antimony	0.006
Arsenic	0.010
Barium	2
Beryllium	0.004
Cadmium	0.005
Chromium	0.1
Fluoride	4.0
Mercury	0.002
Selenium	0.05
Thallium	0.002

(2) Combined radium-226 and -228. The maximum contaminant level for combined radium-226 and radium- 228 shall be 5 picocuries per liter. The combined radium-226 and radium-228 value shall be determined by the addition of the results of the analysis for radium-226 and the analysis for radium-228.

KCS 28-29-742. Boundary well location. For the purposes of monitoring well installation, the closest practical distance from the waste boundary shall be determined based on all of the following.

(a) The installation of the well shall not cause structural instability of the unit.

(b) The well shall not be placed in a location that is physically dangerous to access.

(c) The well shall not need to be decommissioned within five years of installation due to construction of an adjacent unit, based on a plan approved by the secretary in accordance with KCS 28-29-770.

(d) The location of the well shall not be undesirable for any other reason, based on approval of the well location by the secretary.

KCS 28-29-743. Alternative groundwater protection standard. The owner or operator of any CCR unit may submit a request to the department for the secretary to establish an alternative groundwater protection standard for any constituent for which a maximum contaminant level (MCL) has not been established in KCS 28-29-741. The request may be granted by the secretary if all of the following conditions are met:

(a) The owner or operator demonstrates to the secretary that the alternative groundwater protection standard meets the criteria of KCS 257.95(j), including consideration of all of the factors listed in KCS 257.95(j)(2);

(b) the demonstration was developed by an independent technical expert or experts;

(c) an independent qualified groundwater scientist certifies that the alternative groundwater protection standard was developed in accordance with KCS 257.95(j)(1); and

(d) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-744. Demonstration of compliance with groundwater protection standards. The length of time specified in KCS 257.98(c)(2) for the demonstration of compliance with the groundwater protection standards may be lengthened or shortened by the secretary, according to the following:

(a) The determination to lengthen or shorten the length of time for demonstration of compliance shall be based upon one or more of the following factors:

(1) The extent and concentration of the release;

(2) the behavior characteristics of the hazardous constituents in the groundwater;

(3) the accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy;

(4) the characteristics of the groundwater; and

(5) the amount of CCR, if any, remaining in the unit.

(b) The length of time for demonstration of compliance may be lengthened by the secretary if the secretary determines that the lengthened time period is necessary to protect public health or safety or the environment.

(c) The owner or operator of any CCR unit may submit a request to the department to shorten the length of time for demonstration of compliance. The request may be granted by the secretary if the owner or operator demonstrates to the secretary that the constituents are expected to remain at or below the groundwater protection standard specified in KCS 257.95(h).

KCS 28-29-745. Non-groundwater releases. The following apply to the owner or operator of each CCR unit from which a non-groundwater release has occurred.

(a) Within 90 days of discovering a non-groundwater release from any CCR unit, the owner or operator of the unit shall submit to the department a preliminary report concerning the non-groundwater release. The preliminary report shall include both of the following :

(1) A description of the timing, type, and magnitude of the release; and

(2) one of the following:

(A) An estimate of the amount of time it will take to remediate the release; or

(B) a statement that remediation is not necessary because the release has not and will not impact public health or safety or the environment.

(b) The owner or operator of the unit shall obtain written approval from the secretary of the corrective action plan for the non-groundwater release before implementing the plan, unless the approval requirement is waived by the secretary. The secretary may waive the approval requirement if all of the following conditions are met:

(A) The release meets the eligibility conditions of KCS 257.99;

(B) the approval is not necessary based on the type and magnitude of the release; and

(C) waiving the approval requirement does not present a risk to public health or safety or the environment.

(c) The time period from submittal of the corrective action plan, or any amendment to the corrective action plan, to the department and response from the secretary concerning the corrective action plan shall not count towards the 180-day timeframe specified in KCS 257.99.

(d) The owner or operator of a CCR unit who is remediating a non-groundwater release under the provisions of KCS 257.99 may submit a request to the department for one or more 30-day extensions to the 180-day timeframe specified in KCS 257.99(a). The request may be granted by the secretary if the owner or operator performs both of the following:

(1) Demonstrates to the secretary that circumstances beyond the owner or operator’s control will cause remediation to take longer than the 180-day timeframe; and

(2) agrees to any additional requirements specified by the secretary as a condition of granting the extension. The secretary may specify additional requirements if the requirements are necessary to ensure either or both of the following:

(A) Timely completion of the project; or

(B) protection of human health and safety and the environment.

Closure and Post-Closure Care

KCS 28-29-751. Waiver to surface impoundment closure. A waiver to the required closure of any CCR surface impoundment may be requested by the owner or operator of the CCR surface impoundment and may be granted by the secretary according to the following.

(a) Closure due to contamination. The owner or operator of any existing unlined CCR surface impoundment may submit a request to the department for a waiver to the requirements of KCS 257.101(a)(1).

(b) Closure due to placement above the aquifer. The owner or operator of any existing CCR surface impoundment may submit a request to the department for a waiver to the requirements of KCS 257.101(b)(1) if the requirement to close is based on failure to demonstrate compliance with the location standard specified in KCS 257.60(a).

(c) Requirements to grant the waiver. The waiver may be granted by the secretary if all of the following conditions are met:

(1) The owner or operator demonstrates to the secretary one or more of the following:

(A) Measures other than closure will ensure that there is no reasonable probability of adverse impacts to public health or safety or the environment. Measures other than closure may include one or more of the following:

(i) Source control;

(ii) remediation; or

(iii) other technological measures.

(B) The groundwater is contaminated by one or more constituents that meet both of the following conditions:

(i) The constituent or constituents have originated from a source other than the CCR unit; and

(ii) the concentration of the constituent or constituents is such that closure of the CCR unit would provide no significant reduction in risk to actual or potential receptors.

(C) The groundwater meets both of the following conditions:

(i) Is not currently, and is not reasonably expected to be, a source of drinking water; and

(ii) is not hydraulically connected to a potential drinking water source to which any constituents from the CCR unit are likely to migrate in a concentration that would exceed the groundwater protection standards established under KCS 257.95(h).

(D) If the request is for a waiver to the requirements imposed due to failure to demonstrate compliance with the location standard specified in KCS 257.60(a), there is no reasonable potential for migration of hazardous constituents from the CCR unit to the uppermost aquifer during the active life of the unit and the postclosure care period;

(2) each demonstration required by paragraphs (c)(1)(A) through (D) of this standard is certified by a qualified groundwater scientist , and is based upon all of the following:

(A) Site-specific information, which may include the following:

(i) Field collected measurements;

(ii) sampling; and

(iii) analysis of physical, chemical, and biological processes affecting contaminant fate and transport;

(B) contaminant fate and transport predictions that meet the following conditions:

(i) Maximize potential contaminant migration distances;

(ii) maximize potential contaminant concentrations; and

(iii) consider impacts on public health and safety and the environment;

(C) if technological measures will be used to prevent migration of the hazardous constituents to the uppermost aquifer, the proven efficacy of the technology; and

(D) any other relevant information requested by the secretary; and

(3) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-752. Materials allowed in units closing for cause.

(a) The owner or operator of any CCR unit that is required to close under one or more of the following provisions, may perform the actions specified in subsections (b) and (c):

(1) KCS 257.101(a), closure due to constituents detected at levels above the groundwater protection standard;

(2) KCS 257.101(b), closure for failure to demonstrate compliance with either or both of the following location standards:

(A) KCS 257.60(a), placement above the aquifer; or

(B) KCS 257.61(a), wetlands.

(b) Before the dewatering process begins, the owner or operator may use the CCR surface impoundment, or a portion of the surface impoundment, to manage stormwater, if the stormwater contains only incidental amounts of CCR.

(c) The owner or operator may submit a request to the department for approval to place CCR or non-CCR wastestreams, or both, in the unit. The request may be granted by the secretary if both of the following conditions are met:

(1) The owner or operator demonstrates both of the following to the secretary:

(A) The material will be used as part of the planned closure activities; and

(B) placement of the material will not cause either of the following:

(i) a negative impact on closure; or

(ii) an increased risk or negative impact to public health or safety or the environment; and

(2) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-753. Closure by removal of CCR; alternative standards.

The owner or operator of a CCR unit may submit a request to the department to complete closure by removal of CCR under alternative standards. The request may be granted by the secretary if all of the following conditions are met:

(a) The owner or operator successfully demonstrates to the secretary that constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit are at or below one of the following:

(1) Background concentrations; or

(2) site-specific, state-approved, risk-based clean-up standards;

(b) groundwater constituent concentrations meet the following conditions:

(1) if an assessment monitoring program is not required for the unit, there is no statically significant increase above background levels for any constituent listed in appendix III; or

(2) if an assessment monitoring program is required for the unit, each constituent listed in appendix IV is at or below the groundwater protection standard established pursuant to § 257.95(h) for that constituent; and

(c) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-754. Alternative final cover systems. The owner or operator of any CCR unit may submit a request to the department for a waiver to one or more of the final cover system requirements in KCS 257.102(d)(3)(ii)(A) through (C). The waiver may be granted by the secretary if all of the following requirements are met:

(a) The owner or operator demonstrates to the secretary that the proposed alternative final cover system design is at least as protective of public health and safety and the environment as the requirements of KCS 257.102(d)(3)(ii)(A) through (C).

(b) The demonstration is based on site-specific conditions which may include one or more of the following:

(1) The physical and chemical characteristics of the CCR that remain or will remain in the unit;

(2) the amount of CCR that remain or will remain in the unit;

(3) annual precipitation;

(4) annual evapotranspiration;

(5) geology;

(6) depth to groundwater;

(7) distance to receptors; and

(8) any other relevant factors.

(c) Public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-755. Alternative closure requirements. The owner or operator of any CCR unit that is required to close under the provisions of KCS 257.101(a), (b)(1), or (d) may submit a request to the department for approval to meet the alternative closure requirements of KCS 257.103(a) or (b) based on

lack of alternative disposal capacity for one or more non-CCR wastestreams. The request may be granted by the secretary if both of the following conditions are met:

(a) The owner or operator demonstrates to the secretary that management of the non-CCR waste in the CCR unit will not adversely affect public health or safety or the environment; and

(b) public notice concerning the request has been given by the department in accordance with the requirements of K.A.R. 28-29-6a.

KCS 28-29-756. Modifications to postclosure care. One or more postclosure care requirements specified in article 29 or the Kansas CCR Standards may be modified by the secretary according to the following:

(a) The determination to modify one or more postclosure care requirements shall be based upon one or more of the following:

(1) The characteristics of the waste that remain in the unit;

(2) leachate analyses;

(3) groundwater analyses; and

(4) any other information required by the secretary.

(b) The length of the postclosure care period for one or more postclosure care activities may be increased by the secretary if the secretary determines that the lengthened period is necessary to protect public health and safety and the environment.

(c) The owner or operator of any CCR unit may submit a request to the secretary for either or both of the following:

(1) A reduction in frequency of a postclosure care activity; or

(2) termination of a postclosure care activity before the end of the 30-year postclosure period.

(d) A request submitted in accordance with paragraph (3) may be granted by the secretary if the owner or operator of the unit demonstrates to the secretary that reduction or termination of the activity will not increase risk to public health or safety or the environment.

(e) If waste remains in the unit, the owner or operator shall maintain the final cover system in accordance with KCS 257.104(b)(1) for the entire 30-year postclosure period.

Recordkeeping and Submittals

KCS 28-29-761. Document retention. The owner or operator of each CCR unit shall retain all of the following documents until the end of the postclosure care period:

(a) Each document that describes the as-built design and construction of the unit; and

(b) each document that has been approved by the secretary under article 29, article 34, or the Kansas CCR Standards.

KCS 28-29-762. Document submittal requirements. The owner or operator of each CCR unit shall submit documents to the department, according to the following:

(a) Unless otherwise specified in article 29, article 34, or the Kansas CCR Standards, the owner or operator shall submit each required document within the following timeframes:

(1) Each document that became available before the effective date of the Kansas CCR Standards, shall be submitted with six months of the effective date of the Kansas CCR Standards; and

(2) each document that becomes available after the effective date of the Kansas CCR Standards, shall be submitted within 15 calendar days of the day the document becomes available.

(b) If certification from a professional engineer or qualified groundwater scientist is required for the document, the certification shall be submitted with the document.

(c) If supporting documentation is required for the document under article 29, article 34, or the Kansas CCR Standards, the supporting documentation shall be submitted with the document.

(d) If the owner or operator submits a document to the department in accordance with this standard, the owner or operator is not required to provide notification to the secretary that the document has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(e) In addition to the submittals required by article 29, article 34, and the Kansas CCR Standards, the owner or operator shall submit any other information requested by the secretary. Additional information

may be requested by the secretary if the information is necessary to evaluate the level of risk the facility presents to human health and safety and the environment.

KCS 28-29-763. Documents to be submitted. The owner or operator of each CCR unit shall submit to the department all of the following, unless the information has previously been submitted to the department:

(a) Each item that requires approval by the secretary;

(b) each demonstration documenting whether or not the CCR unit is or will be in compliance with the location requirements of article 29, article 34, and the Kansas CCR Standards;

(c) each of the following design and construction documents:

(1) All CCR unit design plans. CCR unit design plans shall not be required to include temporary constructions related to operations, including stormwater berms;

(2) each construction quality assurance plan;

(3) each construction quality assurance report;

(4) the documentation of liner type for each existing and inactive surface impoundment;

(5) each hazard class assessment;

(6) each history of construction and each amendment to the history of construction;

(7) each structural stability assessment;

(8) each documentation of corrective measures taken; and

(9) each periodic safety factor assessment;

(d) each of the following operating documents:

(1) Each facility operating plan;

(2) each annual CCR fugitive dust control report;

(3) each report of the annual inspection by a qualified professional engineer; and

(4) each documentation of corrective measures taken.

(e) each of the following groundwater monitoring and corrective action documents:

(1) All groundwater monitoring system design plans;

(2) each groundwater sampling and analysis plan;

(3) each report of analytical results. Each report of analytical results shall be submitted within 90 calendar days of the sampling event;

(4) each groundwater monitoring and corrective action report;

(5) each demonstration of the need for an alternative detection monitoring frequency;

(6) each demonstration that one of the following caused a statistically significant increase over background levels for one or more of the constituents listed in appendix III or appendix IV that triggers the provisions of 40 C.F.R. 257.94(e) or 40 C.F.R. 257.95(g):

(A) A source other than the CCR unit; or

(B) an error in sampling, analysis, or statistical evaluation; or

(C) natural variation in groundwater quality.

(7) each notification of assessment monitoring;

(8) a copy of all notifications sent out in accordance with KCS 257.95(g)(2), and a list of the residents and landowners to whom each notification was sent;

(9) notification of each public meeting that will be held in accordance with KCS 257.96(e), at least 30 days before the public meeting;

(10) the record of each public meeting that was held in accordance with KCS 257.96(e);

(11) each completed assessment of corrective measures;

(12) each report required by KCS 257.97;

(13) each report documenting compliance with KCS 297.98(c)(1) through (3); and

(14) each notice and report required by KCS 257.99(c)(1) through (3) and KCS 28-29-745; and

(f) each of the following retrofit, closure or postclosure documents:

(1) each closure plan, and each modification to the closure plan;

(2) if a time extension to initiate closure is requested, the documentation required by KCS 257.102(e)(2)(ii) and (iii);

(3) if a time extension to complete closure or retrofit is requested, the documentation required by KCS 257.102(f)(2);

(4) each notification of intent to close, at least 60 days before closure activities are planned to begin;

(5) each notification of intent to comply with the alternative closure or retrofit requirements, and each associated progress report;

(6) each certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in article 29 and the Kansas CCR Standards;

(7) a copy of each deed notation;

(8) each notification of intent to retrofit, at least 60 days before retrofit activities are planned to begin;

(9) each retrofit plan, and each amendment to the retrofit plan;

(10) each certification from a qualified professional engineer verifying that retrofit has been completed in accordance with the retrofit plan specified in article 29 and the Kansas CCR Standards;

(11) each postclosure plan;

(12) each certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in article 29 and the Kansas CCR Standards.

Approvals

KCS 28-29-770. Document approvals. Any document that is listed in the Kansas CCR Standards and requires approval by the secretary may be approved by the secretary if the owner or operator demonstrates to the secretary that all of the following conditions are met:

(a) The document meets the requirements and conditions of article 29, article 34, and the Kansas CCR Standards;

(b) the document meets the generally-accepted technical standards appropriate to the subject of the document;

(c) if required by article 29, article 34, or the Kansas CCR Standards, the document has been certified by a qualified professional engineer or a qualified groundwater scientist; and

(d) all actions that will be taken based on the document are protective of human health and safety and the environment.

KCS 28-29-771. Previously certified documents; amendments. (a) Documents that have been certified by a qualified professional engineer or a qualified groundwater scientist and have been placed in the operating record before the effective date of the Kansas CCR Standards shall be recognized by the department to be part of the official facility CCR operating record.

(b) If any document that requires approval by the secretary is amended, the owner or operator of the CCR unit shall submit the amendment to the department with a request for approval of the amendment by the secretary.

KCS 28-29-772. Approval of location, design, and construction. (a) Each person that plans to construct a CCR unit may begin construction of the CCR unit only after all of the following have been approved by the secretary in accordance with KCS 28-29-770:

(1) Each demonstration documenting whether or not the CCR unit will be in compliance with the location requirements article 29, article 34, and the Kansas CCR Standards;

(2) the CCR unit design plans; and

(3) the construction quality assurance (CQA) plan.

(b) The owner or operator of the CCR unit may place waste in the unit only after the final CQA report for construction of the unit has been approved by the secretary in accordance with KCS 28-29-770.

KCS 28-29-773. Approval of permit documents. Each owner or operator of a CCR unit shall have each of the following:

(a) A facility operating plan that has been approved by the secretary in accordance with KCS 28-29-770;

(b) a groundwater monitoring system design plan that has been approved by the secretary in accordance with KCS 28-29-770; and

(c) a groundwater sampling and analysis plan that has been approved by the secretary in accordance with KCS 28-29-770.

KCS 28-29-774. Approval of retrofit, closure, and postclosure documents. (a) Each owner or operator of a CCR unit shall have each of the following:

(1) A closure plan that has been approved by the secretary in accordance with KCS 28-29-770;

(2) a postclosure plan that has been approved by the secretary in accordance with KCS 28-29-770; and

(3) if the owner or operator of a CCR surface impoundment plans to retrofit the CCR surface impoundment, a retrofit plan that has been approved by the secretary in accordance with KCS 28-29-770.

KCS 28-29-775. Approval of closure documents. The timelines for determining the following shall begin only after both the closure certification specified in KCS 257.102(f)(3) and the construction quality assurance report for closure of the unit have been approved by the secretary in accordance with KCS 28-29-770:

(a) Reduction or termination of one or more postclosure care activities, in accordance with KCS 28-29-756; and

(b) reduction in the number of years of postclosure care that is used to determine the amount of financial assurance required for the unit.

Plans and Reports

KCS 28-29-781. CCR unit design plans. The applicant or owner or operator shall include each of the following items in the CCR unit design plans, if the item applies to that unit:

(a) A plat of survey that includes the following:

(1) the section, township, and range of the facility

(2) the facility boundaries;

(3) a description of all properties that are adjacent to the facility, including the land use and the names and addresses of property owners. If the proposed facility is adjacent to a public road or street, the property across the street or road shall also be described;

(b) a minimum of three cross sections of the proposed CCR unit, with the water table shown;

(c) a topographic map of the facility and surrounding area that meets the following conditions:

(1) Shows the size and location of all existing and proposed human-made and natural features of the facility, including the following:

(A) Roads, fire lanes, entrances and exits, and parking areas;

(B) ditches, berms, and culverts;

(C) wetlands floodways, and surface waters;

(D) buildings, fences, gates, and signs; and

(E) the location of all water supplies; and

(2) Has a contour interval of two feet or less.

(d) a series of phasing plans showing CCR unit development over the life of the CCR unit. Each plan shall indicate the location of all peripheral features, including support buildings, access roads, drainage ditches, sedimentation basins, all other stormwater management features, and screening berms;

(e) an erosion control plan outlining management practices to control erosion from disturbed areas;

(f) the current copy of each notice of intent submitted to the department's bureau of water and each required stormwater pollution prevention plan;

(g) if the unit has, or will have, a leachate control system, a leachate management plan that includes an implementation schedule; and

(h) if the unit is located in an unstable area according to the criteria specified in KCS 257.64, a description of the engineering measures incorporated into the unit's design to ensure that the integrity of the structural components of the CCR unit will not be disrupted.

(i) the following maps:

(1) A 7.5-minute series map of the area, as typically available from the U.S. geological survey, indicating the property boundary;

(2) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;

(3) a 100-year floodplain map of the area, if one has been developed for the area by the federal emergency management agency (FEMA). If a FEMA map is not available, the or owner or operator shall submit a map showing the estimated location of the 100-year floodplain based on historical or hydrogeologic data; and

(l) any other items required by article 29, article 34, or the Kansas CCR Standards or requested by the secretary. Additional information may be requested by the secretary if the information in necessary to evaluate the level of risk the CCR unit presents or would present to human health and safety and the environment.

KCS 28-29-782. Construction quality assurance plans and reports. The applicant or owner or operator shall ensure each CQA plan and each CQA final report meets the following conditions:

(a) Each CQA plan shall meet the following conditions:

(1) The CQA plan shall include a detailed description of all CQA activities that will be performed to ensure that the unit is constructed as specified in the approved design documents, including construction of the following items:

(A) Each stormwater management structure;

(B) each leachate management system, if the unit will have one or more leachate management systems;

(C) base elevations;

(D) final cover; and

(E) all other components of the waste containment and management system.

(b) Each CQA plan shall be tailored to the specific unit to be constructed and shall be completely integrated into the project's plans and specifications.

(c) Each CQA plan shall include the responsibilities and qualifications of the CQA personnel.

(d) The final CQA report shall contain documentation, and certification by a professional engineer, that the CCR unit was constructed in substantial accordance with the approved design documents and the approved CQA plan.

(e) The CQA personnel and the CQA certifying professional engineer shall be employed by an organization that operates independently of both of the following:

(1) The landfill owner; and

(2) the permit holder.

KCS 28-29-783. Facility operating plans. The applicant or owner or operator shall include the following items in the facility operating plan:

(a) The proposed operating hours of the facility;

(b) the origin and composition of the waste;

(c) the anticipated maximum daily volume of all waste to be accepted at the facility;

(d) the procedures for placing the waste;

(e) the safety procedures for personnel and public on-site;

(f) the fugitive dust control plan;

(g) a description of stormwater control measures to be implemented, including the following:

(1) For CCR landfills, a run-on and run-off control system plan; and

(2) for CCR surface impoundments, an inflow design flood control system plan;

(h) a description of the facility's water supply system, including the source and intended uses;

(i) a description of all machinery and equipment to be used, including the design capacity;

(j) a contingency plan for the following:

(1) Emergencies, including fires and spills; and

(2) any other unexpected suspension of operations, including equipment breakdown and personnel emergencies;

(3) a description of when and why the operator would suspend receipt of waste at the facility, including the following:

(A) Temporary situations;

(B) final closure due to conditions of the permit; and

(C) attainment of final elevations;

(k) for CCR landfills, a drawing that delineates and numerates phases in the landfill development sequence, along with a written description of the facility development approach and the waste placement progression in individual units;

(l) the estimated capacity of the facility;

(m) the expected life of the facility; and

(n) any other items required by article 29, article 34, or the Kansas CCR Standards or requested by the secretary. Additional information may be requested by the secretary if the information in necessary to evaluate the level of risk the CCR unit presents or would present to human health and safety and the environment.

KCS 28-29-784. Groundwater monitoring plans and reports. In addition to the requirements of KCS 257.90 through 257.95, the applicant or CCR unit owner or operator shall prepare groundwater monitoring plans and reports according to the following:

(a) Groundwater monitoring system design plans shall include the following:

(1) A map that identifies the location of the facility;

(2) a facility map that includes all of the following:

(A) A north arrow

(B) all facility property lines;

(C) the boundaries of each CCR unit;

(D) the location of each groundwater monitoring well, uniquely identified by number or name;

(E) all on-site buildings;

(3) a description of the groundwater monitoring system and the wells included in the system;

(4) the aquifer rate of recharge;

(5) a table that includes the following information for each groundwater monitoring well:

(A) the well identification number or name;

(B) the identification number or name of the CCR unit or units that the well is being used to monitor;

(C) whether the well is typically upgradient, cross-gradient, or downgradient of the CCR unit;

(D) the name of the geologic formation that the well is being used to monitor;

(E) the elevation of the top of the well casing;

(G) the installed depth of the well;

(H) the length and depth of the screened interval; and

(I) the diameter of the well casing;

(6) an appendix that includes well logs for each monitoring well in the groundwater monitoring system;

(7) an appendix that includes data to support the design plan, including the location of each well as established by a Kansas licensed surveyor; and

(8) any other items required by article 29, article 34, or the Kansas CCR Standards or requested by the secretary. Additional information may be requested by the secretary if the information in necessary to evaluate the level of risk the CCR unit presents or would present to human health and safety and the environment.

(b) The groundwater sampling and analysis plan shall include the following:

(1) A sampling schedule describing how often and in which months groundwater samples will be collected;

(2) a list of the equipment that will be used in sample collection process;

(3) a description of the following procedures related to groundwater sample collection;

(A) documentation each sampling event;

(B) well inspection;

(C) groundwater level measurements;

(D) equipment calibration:

(E) purging;

(F) sample collection;

(G) equipment decontamination;

(H) field quality control sample collection; and

(I) redevelopment procedures;

(4) a description the groundwater sample chain of custody procedures;

(5) a description of the laboratory analysis process;

(6) a description of the statistical methods that will be used to evaluate the groundwater monitoring data;

(7) a schedule for submitting reports of analytical results. These reports shall be submitted at least semiannually; and

(8) any other items required by article 29, article 34, or the Kansas CCR Standards or requested by the secretary. Additional information may be requested by the secretary if the information in necessary to evaluate the level of risk the CCR unit presents or would present to human health and safety and the environment.

(c) Each report of analytical results shall include the following:

(1) Whether the sampling was part of a detection monitoring program or an assessment monitoring program;

(2) all results of statistical analyses, including the identification of each statistically significant increase over background values;

(3) a copy of all raw laboratory analytical results and each chain of custody;

(4) for each well that was sampled, the depth to water from the top of the well casing;

(5) a description of the rate and direction of groundwater flow, including a potentiometric surface map;

(6) copies of all final field notes or field sheets;

(7) a written summary and table of all of the analytical results;

(8) a data validation summary;

(9) the water quality parameters in a format specified by the department;

(10) a description of each deviation from the approved sampling and analysis plan and the reason for the deviation;

(11) certification of the report by a qualified groundwater scientist; and

(12) any other items required by article 29, article 34, or the Kansas CCR Standards or requested by the secretary. Additional information may be requested by the secretary if the information in necessary to evaluate the level of risk the CCR unit presents or would present to human health and safety and the environment.

KCS 28-29-785. Closure plans. The applicant or CCR unit owner or operator shall prepare closure plans according to requirements of KCS 257.102 and the following:

(a) Closure plan drawings. The closure plan drawings shall include the following items:

(1) Surface drawings of the facility showing all of the following information:

(A) Access control;

(B) final contours, with a contour interval of two feet or less:

(C) seeding specifications;

(D) landscaping;

(E) erosion control devices;

(F) final surface water drainage patterns and runoff retention basins; and

(G) each waste disposal or management unit location; and

(2) cross sections of each CCR unit at the facility that depict the following:

(A) The type and depth of cover material;

(B) the leachate collection systems, if present; and

(C) any other pertinent features.

(b) Closure plan text. The closure plan text shall include the following information:

(1) An estimate of the largest area of the CCR unit requiring final cover at any time during the active life of the unit;

(2) a description of the steps necessary to close each CCR unit at any point during its active life in accordance with the cover design requirements;

(3) a schedule for completing all closure activities; and

(4) an estimate of the final volume of wastes disposed of at the facility.

KCS 28-29-786. Postclosure plans. The applicant or CCR unit owner or operator shall prepare postclosure plans according to requirements of KCS 257.104 and shall include a schedule of proposed activities for the postclosure care period, including the following:

(a) Maintenance of cover material;

(b) operation and maintenance of all runoff controls;
(c) operation and maintenance of each retention basin;
(d) maintenance of landscaping;
(e) operation and maintenance of access control; and
(f) operation and maintenance of the leachate collection system, if the unit has a leachate collection system; and
(g) inspections during postclosure.

Appendix C

Applicable Laws and Regulations

60-224. Intervention. (a) *Intervention of right.* On timely motion, the court must permit anyone to intervene who:

(1) Is given an unconditional right to intervene by a statute; or

(2) claims an interest relating to the property or transaction that is the subject of the action, and is so situated that disposing of the action may as a practical matter substantially impair or impede the movant's ability to protect its interest, unless existing parties adequately represent that interest.

(b) *Permissive intervention.* (1) *In general.* On timely motion, the court may permit anyone to intervene who:

(A) Is given a conditional right to intervene by a statute; or

(B) has a claim or defense that shares with the main action a common question of law or fact.

(2) *By a government officer or agency.* (A) On timely motion, the court may permit a governmental officer or agency to intervene if a party's claim or defense is based on:

(i) A statute or executive order administered by the officer or agency; or

(ii) any regulation, order, requirement or agreement issued or made under the statute or executive order.

(B) When the validity of an ordinance, regulation, statute or constitutional provision of this state or a governmental subdivision of this state is drawn in question in any action to which the state or governmental subdivision or an officer, agency or employee thereof is not a party, the court may notify the chief legal officer of the state or its subdivision, and permit intervention on proper application.

(C) When notice to the attorney general is required by K.S.A. 2017 Supp. 75-764, and amendments thereto, the court must permit intervention by the attorney general on proper application.

(3) *Delay or prejudice.* In exercising its discretion, the court must consider whether the intervention will unduly delay or prejudice the adjudication of the original parties' rights.

(c) *Notice and pleading required.* A motion to intervene must be served on the parties as provided in K.S.A. 60-205, and amendments thereto. The motion must state the grounds for intervention and be accompanied by a pleading that sets out the claim or defense for which intervention is sought.

History: L. 1963, ch. 303, 60-224; amended by Supreme Court order dated July 17, 1969; L. 2010, ch. 135, § 93; L. 2016, ch. 8, § 2; July 1.

65-3401. Statement of policy. It is hereby declared that protection of the health and welfare of the citizens of Kansas requires the safe and sanitary disposal of solid wastes. The legislature finds that the lack of adequate state regulations and control of solid waste and solid waste management systems has resulted in undesirable and inadequate solid waste management practices that are detrimental to the health of the citizens of the state; degrade the quality of the environment; and cause economic loss. For these reasons it is the policy of the state to:

(a) Establish and maintain a cooperative state and local program of planning and technical and financial assistance for comprehensive solid waste management.

(b) Utilize the capabilities of private enterprise as well as the services of public agencies to accomplish the desired objectives of an effective solid waste management program.

(c) Require a permit for the operation of solid waste processing and disposal systems.

(d) Achieve and maintain status for the Kansas department of health and environment as an approved state agency for the purpose of administering federal municipal solid waste management laws and regulations.

(e) Encourage the wise use of resources through development of strategies that reduce, reuse and recycle materials.

History: L. 1970, ch. 264, § 1; L. 1992, ch. 316, § 1; L. 1997, ch. 140, § 1; July 1.

65-3402. Definitions. As used in this act, unless the context otherwise requires:

(a) "Solid waste" means garbage, refuse, waste tires as defined by K.S.A. 65-3424, and amendments thereto, and other discarded materials, including, but not limited to, solid, semisolid, sludges, liquid and contained gaseous waste materials resulting from industrial, commercial, agricultural and domestic activities. Solid waste does not include hazardous wastes as defined by subsection (f) of K.S.A. 65-3430, and amendments thereto, recyclables or the waste of domestic animals as described by subsection (a)(1) of K.S.A. 65-3409, and amendments thereto.

(b) "Solid waste management system" means the entire process of storage, collection, transportation, processing, and disposal of solid wastes by any person engaging in such process as a business, or by any state agency, city, authority, county or any combination thereof.

(c) "Solid waste processing facility" means incinerator, composting facility, household hazardous waste facility, waste-to-energy facility, transfer station, reclamation facility or any other location where solid wastes are consolidated, temporarily stored, salvaged or otherwise processed prior to being transported to a final disposal site. This term does not include a scrap material recycling and processing facility.

(d) "Solid waste disposal area" means any area used for the disposal of solid waste from more than one residential premises, or one or more commercial, industrial, manufacturing or municipal operations. "Solid waste disposal area" includes all property described or included within any permit issued pursuant to K.S.A. 65-3407, and amendments thereto.

(e) "Person" means individual, partnership, firm, trust, company, association, corporation, individual or individuals having controlling or majority interest in a corporation, institution, political subdivision, state agency or federal department or agency.

(f) "Waters of the state" means all streams and springs, and all bodies of surface or groundwater, whether natural or artificial, within the boundaries of the state.

(g) "Secretary" means the secretary of health and environment.

(h) "Department" means the Kansas department of health and environment.

(i) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any water.

(j) "Open dumping" means the disposal of solid waste at any solid waste disposal area or facility which is not permitted by the secretary under the authority of K.S.A. 65-3407, and amendments thereto, or the disposal of solid waste contrary to rules and regulations adopted pursuant to K.S.A. 65-3406, and amendments thereto.

(k) "Generator" means any person who produces or brings into existence solid waste.

(l) "Monitoring" means all procedures used to (1) systematically inspect and collect data on the operational parameters of a facility, an area or a transporter, or (2) to systematically collect and analyze data on the quality of the air, groundwater, surface water or soils on or in the vicinity of a solid waste processing facility or solid waste disposal area.

(m) "Closure" means the permanent cessation of active disposal operations, abandonment of the disposal area, revocation of the permit or filling with waste of all areas and volume specified in the permit and preparing the area for the long-term care.

(n) "Postclosure" means that period of time subsequent to closure of a solid waste disposal area when actions at the site must be performed.

(o) "Reclamation facility" means any location at which material containing a component defined as a hazardous substance pursuant to K.S.A. 65-3452a, and amendments thereto, or as an industrial waste pursuant to this section is processed.

(p) "Designated city" means a city or group of cities which, through interlocal agreement with the county in which they are located, is delegated the responsibility for preparation, adoption or implementation of the county solid waste plan.

(q) "Nonhazardous special waste" means any solid waste designated by the secretary as requiring extraordinary handling in a solid waste disposal area.

(r) "Recyclables" means any materials that will be used or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product. "Recyclables" includes, but is not limited to, paper, glass, plastic, municipal water treatment residues, as defined by K.S.A. 65-163, and amendments thereto, and metal, but does not include yard waste.

(s) "Scrap material processing industry" means any person who accepts, processes and markets recyclables.

(t) "Scrap material recycling and processing facility" means a fixed location that utilizes machinery and equipment for processing only recyclables.

(u) "Construction and demolition waste" means solid waste resulting from the construction, remodeling, repair and demolition of structures, roads, sidewalks and utilities; untreated wood and untreated sawdust from any source; treated wood from construction or demolition projects; small amounts of municipal solid waste generated by the consumption of food and drinks at construction or demolition sites, including, but not limited to, cups, bags and bottles; furniture and appliances from which ozone depleting chlorofluorocarbons have been removed in accordance with the provisions of the federal clean air act; solid waste consisting of motor vehicle window glass; and solid waste consisting of vegetation from land clearing and grubbing, utility maintenance, and seasonal or storm-related cleanup. Such wastes include, but are not limited to, bricks, concrete and other masonry materials, roofing materials, soil, rock, wood, wood products, wall or floor coverings, plaster, drywall, plumbing fixtures, electrical wiring, electrical components containing no hazardous materials, nonasbestos insulation and construction related packaging. "Construction and demolition waste" shall not include waste material containing friable asbestos, garbage, furniture and appliances from which ozone depleting chlorofluorocarbons have not been removed in accordance with the

provisions of the federal clean air act, electrical equipment containing hazardous materials, tires, drums and containers even though such wastes resulted from construction and demolition activities. Clean rubble that is mixed with other construction and demolition waste during demolition or transportation shall be considered to be construction and demolition waste.

(v) "Construction and demolition landfill" means a permitted solid waste disposal area used exclusively for the disposal on land of construction and demolition wastes. This term shall not include a site that is used exclusively for the disposal of clean rubble.

(w) "Clean rubble" means the following types of construction and demolition waste: Concrete and concrete products including reinforcing steel, asphalt pavement, brick, rock and uncontaminated soil as defined in rules and regulations adopted by the secretary.

(x) "Industrial waste" means all solid waste resulting from manufacturing, commercial and industrial processes which is not suitable for discharge to a sanitary sewer or treatment in a community sewage treatment plant or is not beneficially used in a manner that meets the definition of recyclables. Industrial waste includes, but is not limited to: Mining wastes from extraction, beneficiation and processing of ores and minerals unless those minerals are returned to the mine site; fly ash, bottom ash, slag and flue gas emission wastes generated primarily from the combustion of coal or other fossil fuels; cement kiln dust; waste oil and sludges; waste oil filters; and fluorescent lamps.

(y) "Composting facility" means any facility that composts wastes and has a composting area larger than one-half acre.

(z) "Household hazardous waste facility" means a facility established for the purpose of collecting, accumulating and managing household hazardous waste and may also include small quantity generator waste or agricultural pesticide waste, or both. Household hazardous wastes are consumer products that when discarded exhibit hazardous characteristics.

(aa) "Waste-to-energy facility" means a facility that processes solid waste to produce energy or fuel.

(bb) "Transfer station" means any facility where solid wastes are transferred from one vehicle to another or where solid wastes are stored and consolidated before being transported elsewhere, but shall not include a collection box provided for public use as a part of a county-operated solid waste management system if the box is not equipped with compaction mechanisms or has a volume smaller than 20 cubic yards.

(cc) "Municipal solid waste landfill" means a solid waste disposal area where residential waste is placed for disposal. A municipal solid waste landfill also may receive other nonhazardous wastes, including commercial solid waste, sludge and industrial solid waste.

(dd) "Construction related packaging" means small quantities of packaging wastes that are generated in the construction, remodeling or repair of structures and related appurtenances. "Construction related packaging" does not include packaging wastes that are generated at retail establishments selling construction materials, chemical containers generated from any source or packaging wastes generated during maintenance of existing structures.

(ee) "Industrial facility" includes all operations, processes and structures involved in the manufacture or production of goods, materials, commodities or other products located on, or adjacent to, an industrial site and is not limited to a single owner or to a single industrial process. For purposes of this act, it includes all industrial processes and applications that may generate industrial waste which may be disposed at a solid waste disposal area which is permitted by the secretary and operated for the industrial facility generating the waste and used only for industrial waste.

History: L. 1970, ch. 264, § 2; L. 1974, ch. 352, § 156; L. 1977, ch. 221, § 1; L. 1979, ch. 202, § 1; L. 1981, ch. 251, § 21; L. 1992, ch. 316, § 2; L. 1993, ch. 274, § 1; L. 1994, ch. 283, § 1; L. 1995,

ch. 221, § 1; L. 1997, ch. 140, § 2; L. 2001, ch. 127, § 1; L. 2002, ch. 121, § 1; L. 2005, ch. 25, § 1; L. 2006, ch. 53, § 1; April 6.

65-3403.

History: L. 1970, ch. 264, § 3; Repealed, L. 1974, ch. 352, § 189; July 1.

65-3404.

History: L. 1970, ch. 264, § 4; L. 1974, ch. 348, § 30; L. 1974, ch. 352, § 157; Repealed, L. 1977, ch. 221, § 9; April 9.

65-3405. Solid waste management plan required; solid waste management committee; process for adoption and revision of plan; contents of plan. (a) Each county of this state, or a designated city, shall submit to the secretary a workable plan for the management of solid waste in such county. The plan developed by each county or designated city shall be adopted by the governing body of such county or designated city if so authorized. Two or more counties, by interlocal agreement entered into pursuant to K.S.A. 12-2901et seq., and amendments thereto, may develop and adopt a regional plan in lieu of separate county plans.

(b) There shall be established in each county or group of counties cooperating in a regional plan a solid waste management committee. A county which cooperates in a regional plan may establish its own county committee in addition to cooperating in the required regional committee. A county which does not cooperate in a regional plan may designate, by interlocal agreement, a city as the solid waste management planning authority for the county. Subject to the requirements of this section, the membership of the committee, the terms of committee members, the organization of the committee and selection of its officers shall be determined by the county or counties by interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq., and amendments thereto. The number of members on the committee, whether an individual county committee or a regional committee, shall be not fewer than five or a number equal to the total number of counties cooperating in the regional plan, whichever is more, and shall not exceed 30. The membership shall include: (1) Representatives of incorporated cities located in the county or counties, not to exceed five members representing any cities of the first class, three members representing any cities of the second class and one member representing any cities of the third class; (2) one representative of unincorporated areas of the county or counties; (3) representatives of the general public, citizen organizations, private industry, any private solid waste management industry operating in the county or counties and any private recycling or scrap material processing industry operating in the county or counties; (4) the recycling coordinator, if any, of the county or counties; and (5) any other persons deemed appropriate by the county, designated city or groups of counties, including, but not limited to, county commissioners, county engineers, county health officers and county planners. Members of the committee shall be appointed by the board of county commissioners or governing body of the designated city or by agreement of the boards of county commissioners cooperating in the plan. A county commissioner shall not be appointed to a regional planning committee unless one or more other noncommissioners also represent the commissioner's county on the committee. A regional planning committee shall include at least one representative of each county in the region. Persons appointed to an individual county planning committee in a county covered by a regional plan may also serve on a regional planning committee. Members appointed to represent cities shall be nominated by the mayor of the city represented, or by agreement of all mayors of the cities represented if more than one city of the class is located in the county or counties. If the nominee is not appointed or rejected within 30 days after nomination, the nominee shall be deemed appointed.

(c) The solid waste management committee, whether an individual county committee or a regional committee, shall: (1) Be responsible for the preparation of the solid waste management plan of the individual county or group of counties; (2) review the plan at least annually; and (3) provide to the county commissioners of the individual county or group of counties served by the plan a report containing the results of the annual plan reviews, including recommendations for revisions to the plan. Annual plan reviews which take place in years when county commissions are scheduled to carry out five-year public hearings in accordance with subsection (d) shall comprehensively evaluate the adequacy of the plan with respect to all criteria established by subsection (j). The responsibilities of a solid waste management committee established in a county which cooperates in a regional plan are to be determined by the county commission of such county.

(d) Each county commission shall: (1) Review the county or regional solid waste management plan, the annual review report and any proposed revisions of the plan prepared by the solid waste management committee; (2) adopt the solid waste management plan or proposed revisions to the plan prepared by the solid waste management committee as submitted or as revised by the county commission, except as provided by subsection (g) for regional plans; (3) at least every five years hold a public hearing on the county or regional solid waste management plan, including a review of projected solid waste management practices and needs for a 10-year planning period; (4) notify the department that the solid waste management committee has completed each annual review and each five-year public hearing and that the commission has adopted the plan or review, except as provided in subsection (g) for regional plans; (5) submit with the annual notification a list of solid waste management committee members representing the county on an individual county committee or a regional committee; and (6) review permit applications for solid waste processing facilities and solid waste disposal areas submitted to the department pursuant to K.S.A. 65-3407, and amendments thereto, to determine consistency of the proposed facility with the county or regional plan and to certify that the area is properly zoned or compatible with surrounding land uses. County commissions may utilize the annual plan review reports prepared by solid waste management committees as the basis for the required five-year public hearings.

(e) The county commission of each county which has completed an individual county solid waste plan shall convene an annual meeting of the county solid waste management committee to review the plan. If a quorum of the solid waste management committee is not present, the county commission may independently complete the annual review required in subsection (c).

(f) The county commission of a county which has completed an individual county solid waste management plan may choose to revise its plan at a time which does not coincide with a scheduled annual review by the county solid waste management committee. In such a case, the county commission shall convene a meeting of the solid waste management committee to review the commission's proposed changes and obtain committee comments and recommendations for plan revision. If a quorum of the solid waste management committee is not present, the county commission may independently revise and adopt the county solid waste management plan. The aforementioned meeting shall include an opportunity for public input.

(g) A regional solid waste management committee shall meet annually to review the regional solid waste management plan. The recommendations of the regional committee shall be distributed to the county commissioners of each county cooperating in the regional plan. Each county commission shall either: (1) Adopt the regional committee report, including any proposed plan revisions, and submit the record of adoption back to the regional committee; or (2) submit comments back to the regional committee. Following the adoption of the annual review report by every county in the region, the regional committee shall notify the department that the annual review or five-year update has been completed.

(h) The county commission of a county which cooperates in a regional solid waste management plan may choose to revise its plan at a time which does not coincide with a scheduled annual review by the regional solid waste management committee. At such time, the provisions of the interlocal agreement shall establish protocols for addressing the needs of the county seeking the change in the regional plan.

(i) Each county or group of counties is required to adopt and implement a solid waste management plan pursuant to this section and is responsible for continued and ongoing planning for systematic solid waste management within the boundaries of such county or group of counties. The solid waste management plan of each county, designated city or group of counties shall provide for a solid waste management system plan to serve all generators of solid waste within the county or group of counties.

(j) Every plan shall:

(1) Delineate areas within the jurisdiction of the political subdivision or subdivisions where waste management systems are in existence and areas where the solid waste management systems are planned to be available within a 10-year period.

(2) Conform to the rules and regulations, standards and procedures adopted by the secretary for implementation of this act.

(3) Provide for solid waste management systems in a manner consistent with the needs and plans of the whole area, and in a manner which will not contribute to pollution of the waters or air of the state, nor constitute a public nuisance and shall otherwise provide for the safe and sanitary disposal of solid waste.

(4) Conform with existing comprehensive plans, population trend projections, engineering and economics so as to delineate with practicable precision those portions of the area which may reasonably be expected to be served by a solid waste management system within the next 10 years.

(5) Take into consideration existing acts and regulations affecting the development, use and protection of air, water or land resources.

(6) Establish a time schedule and revenue schedule for the development, construction and operation of the planned solid waste management systems, together with the estimated cost thereof.

(7) Describe the elements of the plan which will require public education and include a plan for delivering such education.

(8) Include such other reasonable information as the secretary requires.

(9) Establish a schedule for the reduction of waste volumes taking in consideration the following: (A) Source reduction; (B) reuse, recycling, composting; and (C) land disposal.

(10) Take into consideration the development of specific management programs for certain wastes, including but not limited to lead acid batteries, household hazardous wastes, small quantities of hazardous waste, white goods containing chlorofluorocarbons, pesticides and pesticide containers, motor oil, consumer electronics, medical wastes, construction and demolition waste, seasonal clean-up wastes, wastes generated by natural disasters and yard waste.

(k) The plan and any revision of the plan shall be reviewed by appropriate official planning agencies within the area covered by the plan for consistency with programs of comprehensive planning for the area. All such reviews shall be transmitted to the secretary with the proposed plan or revision.

(l) The secretary is hereby authorized to approve or disapprove plans for solid waste management systems, or revisions of such plans, submitted in accordance with this act. If a plan or revision is disapproved, the secretary shall furnish any and all reasons for such disapproval, and the county or group of counties whose plan or revision is disapproved may request a hearing before the secretary in accordance with K.S.A. 65-3412, and amendments thereto.

(m) The secretary is authorized to provide technical assistance to counties or designated cities in coordinating plans for solid waste management systems required by this act, including revisions of such plans.

(n) The secretary may recommend that two or more counties adopt, submit and implement a regional plan rather than separate county plans.

(o) The secretary may institute appropriate action to compel submission of plans or plan revisions in accordance with this act and the rules and regulations, standards and procedures of the secretary.

(p) Upon approval of the secretary of a solid waste management plan, the county or designated city is authorized and directed to implement the provisions contained in the plan.

(q) A county cooperating in a regional solid waste management plan may withdraw from such plan only:

(1) In accordance with the terms of the interlocal agreement adopting the old plan or upon revision or termination of such agreement to permit withdrawal and upon a determination by the secretary that the existing regional solid waste management plan will not be significantly affected by the withdrawal; or

(2) if two or more revised solid waste management plans are prepared and submitted to the department for review and approval addressing solid waste management in counties which have decided to plan individually or in any newly formed regions.

History: L. 1970, ch. 264, § 5; L. 1974, ch. 352, §158; L. 1992, ch. 316, § 3; L. 1997, ch. 140, § 3; L. 2002, ch. 79, § 1; July 1.

65-3406. Duties and functions of secretary; rules and regulations; exemption of certain solid waste disposal areas from certain requirements. (a) The secretary is authorized and directed to:

(1) Adopt such rules and regulations, standards and procedures relative to solid waste management as necessary to protect the public health and environment, prevent public nuisances and enable the secretary to carry out the purposes and provisions of this act.

(2) Report to the legislature on further assistance needed to administer the solid waste management program.

(3) Administer the solid waste management program pursuant to provisions of this act.

(4) Cooperate with appropriate federal, state, interstate and local units of government and with appropriate private organizations in carrying out duties under this act.

(5) Develop a statewide solid waste management plan.

(6) Provide technical assistance, including the training of personnel to cities, counties and other political subdivisions.

(7) Initiate, conduct and support research, demonstration projects and investigations and coordinate all state agency research programs with applicable federal programs pertaining to solid waste management systems.

(8) Establish policies for effective solid waste management systems.

(9) Assist counties and groups of counties to establish and implement solid waste planning and management.

(10) Authorize issuance of such permits and orders and conduct such inspections as may be necessary to implement the provisions of this act and the rules and regulations and standards adopted pursuant to this act.

(11) Conduct and contract for research and investigations in the overall area of solid waste storage, collection, transportation, processing, treatment, recovery and disposal including, but not limited to, new and novel procedures.

(12) Adopt rules and regulations for permitting of all solid waste disposal areas, including those that are privately owned.

(13) Adopt rules and regulations establishing criteria for the location of processing facilities and disposal areas for solid wastes.

(14) Adopt rules and regulations establishing appropriate measures for monitoring solid waste disposal areas and processing facilities, both during operation and after closure.

(15) Adopt rules and regulations requiring that, for such period of time as the secretary shall specify, any assignment, sale, conveyance or transfer of all or any part of the property upon which a permitted disposal area for solid waste is or has been located shall be subject to such terms and conditions as to the use of such property as the secretary shall specify to protect human health and the environment.

(16) Adopt suitable measures, including rules and regulations if appropriate, to encourage recovery and recycling of solid waste for reuse whenever feasible.

(17) Adopt rules and regulations establishing standards for transporters of solid waste.

(18) Adopt rules and regulations establishing minimum standards for closing, termination, and long-term care of sites for the land disposal of solid waste. In this subsection, "site" refers to a site for the land disposal of solid waste which has a permit issued under K.S.A. 65-3407 and amendments thereto. The owner of a site shall be responsible for the long-term care of the site for 30 years after the closing of the site, except the secretary may extend the long-term care responsibility of a particular site or sites as the secretary deems necessary to protect the public health and safety or the environment. Any person acquiring rights of ownership, possession or operation in a permitted site or facility for the land disposal of solid waste at any time after the site has begun to accept waste and prior to closure shall be subject to all requirements of the permit for the site or facility, including the requirements relating to long-term care of the site or facility.

(19) Enter into cooperative agreements with the secretary of commerce for the development and implementation of statewide market development for recyclable materials.

(20) Adopt rules and regulations for the management of nonhazardous special wastes.

(b) In adopting rules and regulations, the secretary shall allow the exemption contained in subsection (f)(1) of 40 CFR 258.1 (October 9, 1991), as amended and in effect on the effective date of this act.

(c) (1) Any rules and regulations adopted by the secretary which establish standards for solid waste processing facilities or solid waste disposal areas that are more stringent than the standards required by federal law or applicable federal regulations on such date shall not become effective until 45 days after the beginning of the next ensuing session of the legislature, which date shall be specifically provided in such rule and regulation.

(2) The provisions of subsection (c)(1) shall not apply to rules and regulations adopted before January 1, 1995, which establish standards for location, design and operation of solid waste processing facilities and disposal areas.

(d) Any solid waste disposal area which qualifies for the exemption provided for by subsection (b) and which successfully demonstrates that naturally occurring geological conditions provide sufficient protection against groundwater contamination shall not be required to construct a landfill liner or leachate collection system. The secretary shall adopt rules and regulations which establish criteria for performing this demonstration and standards for liner and leachate collection systems for exempt landfills which fail the demonstration. Solid waste disposal areas which qualify for the

exemption provided for by subsection (b) may be designed with trenches or units which have straight vertical walls. All solid waste disposal areas which qualify for the exemption provided for by subsection (b) shall be required to comply with all applicable rules and regulations adopted by the secretary and approved by the U.S. environmental protection agency, including location restrictions, operating requirements and closure standards for municipal solid waste landfills. Operating requirements include, but are not limited to, hazardous waste screening, daily cover, intermediate cover, disease vector control, gas monitoring and management, air emissions, survey controls, compaction, recordkeeping and groundwater monitoring.

The identification of groundwater contamination caused by disposal activities at a solid waste disposal area which has qualified for the exemption provided for by subsection (b) shall result in:

(1) The loss of such exemption; and

(2) the application of all corrective action and design requirements specified in federal laws and regulations, or in equivalent rules and regulations adopted by the secretary and approved by the U.S. environmental protection agency, to such disposal area.

History: L. 1970, ch. 264, § 6; L. 1974, ch. 352, § 159; L. 1975, ch. 312, § 12; L. 1977, ch. 221, § 2; L. 1979, ch. 202, § 5; L. 1981, ch. 251, § 22; L. 1992, ch. 316, § 4; L. 1993, ch. 274, § 2; L. 1994, ch. 283, § 2; L. 1995, ch. 140, § 1; L. 1997, ch. 139, § 1; July 1.

65-3406a, 65-3406b.

History: L. 1979, ch. 202, §§ 2, 3; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3406c.

History: L. 1979, ch. 202, § 4; L. 1980, ch. 158, § 3; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3406d.

History: L. 1980, ch. 158, § 4, Repealed, L. 1981, ch. 251, § 28; July 1.

65-3407. Permits to construct, alter or operate solid waste processing facilities and solid waste disposal areas; requirements for closure and post-closure care. (a) Except as otherwise provided by K.S.A. 65-3407c, and amendments thereto, no person shall construct, alter or operate a solid waste processing facility or a solid waste disposal area of a solid waste management system, except for clean rubble disposal sites, without first obtaining a permit from the secretary.

(b) Every person desiring to obtain a permit to construct, alter or operate a solid waste processing facility or disposal area shall make application for such a permit on forms provided for such purpose by the rules and regulations of the secretary and shall provide the secretary with such information as necessary to show that the facility or area will comply with the purpose of this act. Upon receipt of any application and payment of the application fee, the secretary, with advice and counsel from the local health authorities and the county commission, shall make an investigation of the proposed solid waste processing facility or disposal area and determine whether it complies with the provisions of this act and any rules and regulations and standards adopted thereunder. The secretary also may consider the need for the facility or area in conjunction with the county or regional solid waste management plan. If the investigation reveals that the facility or area conforms with the provisions of the act and the rules and regulations and standards adopted thereunder, the secretary shall approve the application and shall issue a permit for the operation of each solid waste processing or disposal facility or area set forth in the application. If the facility or area fails to meet the rules and regulations and standards required by this act the secretary shall issue a report to the applicant stating the

deficiencies in the application. The secretary may issue temporary permits conditioned upon corrections of construction methods being completed and implemented.

(c) Before reviewing any application for permit, the secretary shall conduct a background investigation of the applicant. The secretary shall consider the financial, technical and management capabilities of the applicant as conditions for issuance of a permit. The secretary may reject the application prior to conducting an investigation into the merits of the application if the secretary finds that:

(1) The applicant currently holds, or in the past has held, a permit under this section and while the applicant held a permit under this section the applicant violated a provision of subsection (a) of K.S.A. 65-3409, and amendments thereto; or

(2) the applicant previously held a permit under this section and that permit was revoked by the secretary; or

(3) the applicant failed or continues to fail to comply with any of the provisions of the air, water or waste statutes, including rules and regulations issued thereunder, relating to environmental protection or to the protection of public health in this or any other state or the federal government of the United States, or any condition of any permit or license issued by the secretary; or if the secretary finds that the applicant has shown a lack of ability or intention to comply with any provision of any law referred to in this subsection or any rule and regulation or order or permit issued pursuant to any such law as indicated by past or continuing violations; or

(4) the applicant is a corporation and any principal, shareholder, or other person capable of exercising total or partial control of such corporation could be determined ineligible to receive a permit pursuant to subsection (c)(1), (2) or (3) above.

(d) Before reviewing any application for a permit, the secretary may request that the attorney general perform a comprehensive criminal background investigation of the applicant; or in the case of a corporate applicant, any principal, shareholder or other person capable of exercising total or partial control of the corporation. The secretary may reject the application prior to conducting an investigation into the merits of the application if the secretary finds that serious criminal violations have been committed by the applicant or a principal of the corporation.

(e) (1) The fees for a solid waste processing or disposal permit shall be established by rules and regulations adopted by the secretary. The fee for the application and original permit shall not exceed $5,000. Except as provided by paragraph (2), the annual permit renewal fee shall not exceed $2,000. No refund shall be made in case of revocation. In establishing fees for a construction and demolition landfill, the secretary shall adopt a differential fee schedule based upon the volume of construction and demolition waste to be disposed of at such landfill. All fees shall be deposited in the state treasury and credited to the solid waste management fund. A city, county, other political subdivision or state agency shall be exempt from payment of the fee but shall meet all other provisions of this act.

(2) The annual permit renewal fee for a solid waste disposal area which is permitted by the secretary, owned or operated by the facility generating the waste and used only for industrial waste generated by such facility shall be not less than $1,000 nor more than $4,000. In establishing fees for such disposal areas, the secretary shall adopt a differential fee schedule based upon the characteristics of the disposal area sites.

(f) Plans, designs and relevant data for the construction of solid waste processing facilities and disposal sites shall be prepared by a professional engineer licensed to practice in Kansas and shall be submitted to the department for approval prior to the construction, alteration or operation of such facility or area. In adopting rules and regulations, the secretary may specify sites, areas or facilities where the environmental impact is minimal and may waive such preparation requirements provided that a review of such plans is conducted by a professional engineer licensed to practice in Kansas.

(g) Each permit granted by the secretary, as provided in this act, shall be subject to such conditions as the secretary deems necessary to protect human health and the environment and to conserve the sites. Such conditions shall include approval by the secretary of the types and quantities of solid waste allowable for processing or disposal at the permitted location.

(h) Before issuing or renewing a permit to operate a solid waste processing facility or solid waste disposal area, the secretary shall require the permittee to demonstrate that funds are available to ensure payment of the cost of closure and postclosure care and provide liability insurance for accidental occurrences at the permitted facility.

(1) If the permittee owns the land where the solid waste processing facility or disposal area is located or the permit for the facility was issued before the date this act is published in the Kansas register, the permittee shall satisfy the financial assurance requirement for closure and postclosure care by providing a trust fund, a surety bond guaranteeing payment, an irrevocable letter of credit or insurance policy, or by passing a financial test or obtaining a financial guarantee from a related entity, to guarantee the future availability of funds. The secretary shall prescribe the methods to be used by a permittee to demonstrate sufficient financial strength to become eligible to use a financial test or a financial guarantee procedure in lieu of providing the other financial instruments. Solid waste processing facilities or disposal areas, except municipal solid waste landfills, may also demonstrate financial assurance costs by use of ad valorem taxing power.

(2) If the permittee does not own the land where the solid waste processing facility or disposal area is located and the permit for the facility is issued after the date this act is published in the Kansas register, the permittee shall satisfy the financial assurance requirement for closure and postclosure care by providing a trust fund, a surety bond guaranteeing payment, or an irrevocable letter of credit.

(3) The secretary shall require each permittee of a solid waste processing facility or disposal area to provide liability insurance coverage during the period that the facility or area is active, and during the term of the facility or area is subject to postclosure care, in such amount as determined by the secretary to insure the financial responsibility of the permittee for accidental occurrences at the site of the facility or area. Any such liability insurance as may be required pursuant to this subsection or pursuant to the rules and regulations of the secretary shall be issued by an insurance company authorized to do business in Kansas or by a licensed insurance agent operating under authority of K.S.A. 40-246b, and amendments thereto, and shall be subject to the insurer's policy provisions filed with and approved by the commissioner of insurance pursuant to K.S.A. 40-216, and amendments thereto, except as authorized by K.S.A. 40-246b, and amendments thereto. Nothing contained in this subsection shall be deemed to apply to any state agency or department or agency of the federal government.

(i) (1) Permits granted by the secretary as provided by this act shall not be transferable except as follows:

(A) A permit for a solid waste disposal area may be transferred if the area is permitted for only solid waste produced on site from manufacturing and industrial processes or on-site construction or demolition activities and the only change in the permit is a name change resulting from a merger, acquisition, sale, corporate restructuring or other business transaction.

(B) A permit for a solid waste disposal area or a solid waste processing facility may be transferred if the secretary approves of the transfer based upon information submitted to the secretary sufficient to conduct a background investigation of the new owner as specified in subsections (c) and (d) of K.S.A. 65-3407, and amendments thereto, and a financial assurance evaluation as specified in subsection (h) of K.S.A. 65-3407, and amendments thereto. Such information shall be submitted to the secretary not more than one year nor less than 60 days before the transfer. If the secretary does not approve or disapprove the transfer within 30 days after all required information is submitted to the secretary, the transfer shall be deemed to have been approved.

(2) Permits granted by the secretary as provided by this act shall be revocable or subject to suspension whenever the secretary shall determine that the solid waste processing or disposal facility or area is, or has been constructed or operated in violation of this act or the rules and regulations or standards adopted pursuant to the act, or is creating or threatens to create a hazard to persons or property in the area or to the environment, or is creating or threatens to create a public nuisance, or upon the failure to make payment of any fee required under this act.

(3) The secretary also may revoke, suspend or refuse to issue a permit when the secretary determines that past or continuing violations of the provisions of K.S.A. 65-3409, subsection (c)(3) of K.S.A. 65-3407 or K.S.A. 65-3424b, and amendments thereto, have been committed by a permittee, or any principal, shareholder or other person capable of exercising partial or total control over a permittee.

(j) Except as otherwise provided by subsection (i)(1), the secretary may require a new permit application to be submitted for a solid waste processing facility or a solid waste disposal area in response to any change, either directly or indirectly, in ownership or control of the permitted real property or the existing permittee.

(k) In case any permit is denied, suspended or revoked the person, city, county or other political subdivision or state agency may request a hearing before the secretary in accordance with K.S.A. 65-3412, and amendments thereto.

(l) (1) No permit to construct or operate a solid waste disposal area shall be issued on or after the effective date of this act if such area is located within ½ mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system.

(2) Any permit, issued before the effective date of this act, to construct or operate a solid waste disposal area is hereby declared void if such area is not yet in operation and is located within ½ mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system.

(3) The provisions of this subsection shall not be construed to prohibit: (A) Issuance of a permit for lateral expansion onto land contiguous to a permitted solid waste disposal area in operation on the effective date of this act; (B) issuance of a permit for a solid waste disposal area for disposal of a solid waste by-product produced on-site; (C) renewal of an existing permit for a solid waste area in operation on the effective date of this act; or (D) activities which are regulated under K.S.A. 65-163 through 65-165 or 65-171d, and amendments thereto.

(m) Before reviewing any application for a solid waste processing facility or solid waste disposal area, the secretary shall require the following information as part of the application:

(1) Certification by the board of county commissioners or the mayor of a designated city responsible for the development and adoption of the solid waste management plan for the location where the processing facility or disposal area is or will be located that the processing facility or disposal area is consistent with the plan. This certification shall not apply to a solid waste disposal area for disposal of only solid waste produced on site from manufacturing and industrial processes or from on-site construction or demolition activities.

(2) If the location is zoned, certification by the local planning and zoning authority that the processing facility or disposal area is consistent with local land use restrictions or, if the location is not zoned, certification from the board of county commissioners that the processing facility or disposal area is compatible with surrounding land use.

(3) For a solid waste disposal area permit issued on or after July 1, 1999, proof that the applicant either owns the land where the disposal area will be located or operates the solid waste disposal area for an adjacent or on-site industrial facility, if the disposal area is: (A) A municipal solid waste landfill; or (B) a solid waste disposal area that has: (i) A leachate or gas collection or treatment system; (ii) waste containment systems or appurtenances with planned maintenance schedules; or

(iii) an environmental monitoring system with planned maintenance schedules or periodic sampling and analysis requirements. If the applicant does not own the land, the applicant shall also provide proof that the applicant has acquired and duly recorded an easement to the landfill property. The easement shall authorize the applicant to carry out landfill operations, closure, post-closure care, monitoring, and all related construction activities on the landfill property as required by applicable solid waste laws and regulations, as established in permit conditions, or as ordered or directed by the secretary. Such easement shall run with the land if the landfill property is transferred and the easement may only be vacated with the consent of the secretary. These requirements shall not apply to a permit for lateral or vertical expansion contiguous to a permitted solid waste disposal area in operation on July 1, 1999, if such expansion is on land leased by the permittee before April 1, 1999.

History: L. 1970, ch. 264, § 7; L. 1974, ch. 352, § 160; L. 1977, ch. 221, § 3; L. 1981, ch. 251, § 23; L. 1991, ch. 196, § 1; L. 1992, ch. 316, § 5; L. 1993, ch. 274, § 4; L. 1994, ch. 283, § 3; L. 1997, ch. 140, § 4; L. 1999, ch. 112, § 1; L. 2001, ch. 127, § 2; L. 2002, ch. 101, § 1; L. 2006, ch. 53, § 2; April 6.

65-3407a. Special land use permit for operation of solid waste disposal area void, when. Any special land use permit, issued by a city before the effective date of this act, to use land for the purpose of operating a solid waste disposal area is hereby declared void if such area is not yet in operation and such land is located within ½ mile of a navigable stream used for interstate commerce or within one mile of an intake point for any public surface water supply system.

History: L. 1991, ch. 196, § 2; May 16.

65-3407b. Application of subsection (i)(2) of 65-3407 and 65-3407a. The provisions of subsection (i)(2) of K.S.A. 65-3407 and amendments thereto and K.S.A. 65-3407a shall not apply unless the city or county where the original permitted site was located agrees to reimburse the permittee for all moneys expended to obtain the permits and develop the solid waste disposal area or an amount mutually agreed upon by the parties.

History: L. 1991, ch. 196, § 3; May 16.

65-3407c. Exemptions from permit requirement; rules and regulations; reports. (a) The secretary may authorize persons to carry out the following activities without a solid waste permit issued pursuant to K.S.A. 65-3407, and amendments thereto:

(1) Dispose of solid waste at a site where the waste has been accumulated or illegally dumped. Disposal of some or all such waste must be identified as an integral part of a site cleanup and closure plan submitted to the department by the person responsible for the site. No additional waste may be brought to the site following the department's approval of the site cleanup and closure plan.

(2) Perform temporary projects to remediate soils contaminated by organic constituents capable of being reduced in concentration by biodegradation processes or volatilization, or both. Soil to be treated may be generated on-site or off-site. A project operating plan and a site closure plan must be submitted to the department as part of the project approval process.

(3) Dispose of demolition waste resulting from demolition of an entire building or structure if such waste is disposed of at, adjacent to or near the site where the building or structure was located. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The disposal area must be covered with a minimum of two feet of soil and seeded, rocked or paved. The final grades for the disposal site must be compatible with and not detract from the appearance of

adjacent properties. In addition to the factors listed in subsection (b), the secretary shall consider the following when evaluating requests for off-site disposal of demolition waste:

(A) Public safety concerns associated with the building or structure proposed to be demolished.

(B) Proposed plans to redevelop the building site which would be impacted by on-site disposal of debris.

(C) The disposal capacity of any nearby permitted landfill.

(4) Dispose of solid waste generated as a result of a transportation accident if such waste is disposed of on property adjacent to or near the accident site. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. A closure plan must be submitted to the department as part of the authorization process.

(5) Dispose of whole unprocessed livestock carcasses on property at, adjacent or near where the animals died if: (A) Such animals died as a result of a natural disaster or their presence has created an emergency situation; and (B) proper procedures are followed to minimize threats to human health and the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site.

(6) Dispose of solid waste resulting from natural disasters, such as storms, tornadoes, floods and fires, or other such emergencies, when a request for disposal is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the disposal must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the disposal site. The local governmental authority must agree to provide proper closure and postclosure maintenance of the disposal site as a condition of authorization.

(7) Store solid waste resulting from natural disasters, such as storms, tornadoes, floods and fires, or other such emergencies, at temporary waste transfer sites, when a request for storage is made by the local governmental authority having jurisdiction over the area. Authorization shall be granted by the department only when failure to act quickly could jeopardize human health or the environment. Prior to the department's authorization, written approval for the storage must be obtained from the landowner and the local governmental or zoning authority having jurisdiction over the storage site. The local governmental authority must agree to provide proper closure of the storage and transfer site as a condition of authorization.

(8) (A) Dispose of solid waste generated by drilling oil and gas wells by land-spreading in accordance with best management practices and maximum loading rates established in rules and regulations adopted by the secretary.

(B) For any area that annually receives more than 25 inches of precipitation, as determined by the department, any solid waste disposed of by land-spreading shall be incorporated into the soil. No land-spreading shall occur on any area where the water table is less than 10 feet or on any area where there is documented groundwater contamination as determined by the department.

(C) (i) Each separate land-spreading location shall require submission of an application to land-spread drilling waste, complete with all information required on the application form developed by the secretary. The contents of the application form shall include, but are not limited to, the land-spreading location, soil characteristics, waste characteristics, waste volumes, drilling mud additives, land-spreading method and post-land-spreading report. A separate land-spreading application and a post-land-spreading report shall be submitted for each location.

(ii) For the purposes of protecting the health, safety and property of the people of the state, and preventing surface and subsurface water pollution and soil pollution detrimental to public health or to the plant, animal and aquatic life of the state, a land-spreading application may not be approved for the same location unless a minimum of three years has passed since the previous land spreading occurred.

(iii) A fee of $250 shall be paid to the state corporation commission with each drilling waste land-spreading application. The fee shall be remitted to the state treasurer in accordance with K.S.A. 75-4215, and amendments thereto, to be credited to the conservation fee fund.

(D) The secretary and the state corporation commission shall enter into a memorandum of agreement for the purposes of:

(i) Administering the land-spreading application and approval process;

(ii) monitoring compliance; and

(iii) establishing mechanisms for enforcement and remedial actions.

(E) The seller of any property where land-spreading has occurred within the previous three years pursuant to this paragraph shall disclose such land-spreading and the date thereof to any potential purchaser of such property prior to closing.

(F) On or before January 1, 2014, the secretary, in coordination with the state corporation commission, shall adopt rules and regulations governing land-spreading of waste generated by drilling oil and gas wells. In developing such rules and regulations, the secretary and the state corporation commission shall seek advice and comments from groundwater management districts and other groups or persons knowledgeable and experienced in areas related to this paragraph.

(G) On or before January 30 of each year, the state corporation commission, in coordination with the Kansas department of health and environment, shall present a report to the senate standing committees on natural resources, utilities and ways and means and to the house standing committees on agriculture and natural resources, energy and environment and appropriations. Such report shall include, but not be limited to, information concerning the implementation and status of land-spreading procedures and the costs associated with the regulation of land-spreading pursuant to this paragraph.

(b) The secretary shall consider the following factors when determining eligibility for an exemption to the solid waste permitting requirements under this section:

(1) Potential impacts to human health and the environment.

(2) Urgency to perform necessary work.

(3) Costs and impacts of alternative waste handling methods.

(4) Local land use restrictions.

(5) Financial resources of responsible parties.

(6) Technical feasibility of proposed project.

(7) Technical capabilities of persons performing proposed work.

(c) The secretary may seek counsel from local government officials prior to exempting activities from solid waste permitting requirements under this section.

History: L. 1997, ch. 140, § 5; L. 1999, ch. 112, § 2; L. 2001, ch. 127, § 3; L. 2011, ch. 18, § 1; L. 2012, ch. 170, § 1; L. 2015, ch. 35, § 3; July 1.

65-3408. Compliance with act by state institutions and agencies; permits; contracts. All state institutions and agencies shall obtain a permit from the secretary under the provisions of K.S.A. 65-3407 and shall also comply with all other provisions of this act: *Provided further,* That such institutions and agencies may contract with any person, city, county, other political subdivision or state agency to carry out their responsibilities under the act.

History: L. 1970, ch. 264, § 8; L. 1974, ch. 352, § 161; July 1.

65-3409. Unlawful acts; penalties. (a) It shall be unlawful for any person to:

(1) Dispose of any solid waste by open dumping, but this provision shall not prohibit: (A) The use of solid wastes, except for waste tires, as defined by K.S.A. 65-3424, and amendments thereto, in normal farming operations or in the processing or manufacturing of other products in a manner that will not create a public nuisance or adversely affect the public health; or (B) an individual from dumping or depositing solid wastes resulting from such individual's own residential or agricultural activities onto the surface of land owned or leased by such individual when such wastes do not create a public nuisance or adversely affect the public health or the environment.

(2) Except as otherwise provided by K.S.A. 65-3407c, and amendments thereto, construct, alter or operate a solid waste processing or disposal facility or act as a waste tire transporter or mobile waste tire processor, as defined by K.S.A. 65-3424, and amendments thereto, without a permit or be in violation of the rules and regulations, standards or orders of the secretary.

(3) Violate any condition of any permit issued under K.S.A. 65-3407 or 65-3424b, and amendments thereto.

(4) Conduct any solid waste burning operations in violation of the provisions of the Kansas air quality act.

(5) Store, collect, transport, process, treat or dispose of solid waste contrary to the rules and regulations, standards or orders of the secretary or in such a manner as to create a public nuisance.

(6) Refuse or hinder entry, inspection, sampling and the examination or copying of records related to the purposes of this act by an agent or employee of the secretary after such agent or employee identifies and gives notice of their purpose.

(7) Violate subsection (b) of K.S.A. 65-3424a, subsection (c) of K.S.A. 65-3424b or K.S.A. 65-3424i, and amendments thereto.

(8) Divide a solid waste disposal area which has been issued a permit pursuant to K.S.A. 65-3407, and amendments thereto, into two or more parcels of real property for the purpose of selling or transferring a portion of the permitted area to a new owner without receiving prior approval of the secretary. If the secretary does not approve or deny the division of the area within 60 days after the matter is submitted to the secretary for approval, the division shall be deemed to have been approved. Approval pursuant to this subsection shall not be necessary for transfer of a permitted solid waste disposal area as allowed by subsection (i)(1) of K.S.A. 65-3407, and amendments thereto.

(b) No person shall be held responsible for failure to secure a permit under the provisions of this section for the dumping or depositing of any solid waste on land owned or leased by such person without such person's expressed or implied consent, permission or knowledge.

(c) Any person who violates any provision of subsection (a) shall be guilty of a class A misdemeanor and, upon conviction thereof, shall be punished as provided by law.

History: L. 1970, ch. 264, § 9; L. 1974, ch. 352, § 162; L. 1977, ch. 221, § 4; L. 1981, ch. 251, § 24; L. 1991, ch. 197, § 8; L. 1993, ch. 13, § 17; L. 1997, ch. 140, § 6; L. 2001, ch. 127, § 4; July 1.

65-3410. Cities or counties authorized to provide for collection and disposal of solid wastes or contract therefor; fees; adoption of regulations and standards. (a) Each city or county or combination of such cities and counties may provide for the storage, collection, transportation, processing and disposal of solid wastes and recyclables generated within its boundaries; and shall have the power to implement any approved solid waste management plan and to purchase all necessary equipment, acquire all necessary land, build any necessary buildings, incinerators, transfer stations, or other structures, lease or otherwise acquire the right to use land or equipment and to do

all other things necessary for a proper effective solid waste management system and recycling program including the levying of fees and charges upon persons receiving service. On or before the first day of July of each calendar year, the board of county commissioners of any county, may, by resolution establish a schedule of fees to be imposed on real property within any county solid waste and recyclables service area, revenue from such fees to be used: To implement an approved solid waste management plan, to conduct operations necessary to administer the plan and to carry out its purposes and provisions; or for the acquisition, operation and maintenance of county waste disposal sites; or for financing waste collection, storage, processing, reclamation, disposal services and recycling programs, where such services are provided. In establishing the schedule of fees, the board of county commissioners shall classify the real property within the county solid waste and recyclables service area based upon the various uses to which the real property is put, the volume of waste occurring from the different land uses and any other factors that the board determines would reasonably relate the waste disposal and recyclable fee to the real property upon which it would be imposed.

The board shall set a reasonable fee for each category established and divide the real property within the county service areas according to categories and ownership. The board shall impose the appropriate fee upon each division of land and provide for the billing and collection of such fees. The fees may be established, billed, and collected on a monthly, quarterly or yearly basis. Fees collected on a yearly basis may be billed on the ad valorem tax statement. Prior to the collection of any fees levied on real property by the board under this section, the board shall notify affected property owners by causing a copy of the schedule of fees to be mailed to each property owner to whom tax statements are mailed in accordance with K.S.A. 79-2001, and amendments thereto.

Any fees authorized pursuant to this section which remain unpaid for a period of 60 or more days after the date upon which they were billed may be collected thereafter by the county as provided herein.

(1) At least once a year the board of county commissioners shall cause to be prepared a report of delinquent fees. The board shall fix a time, date, and place for hearing the report and any objections or protests thereto.

(2) The board shall cause notice of the hearing to be mailed to the property owners listed on the report not less than 10 days prior to the date of the hearing.

(3) At the hearing the board shall hear any objections or protests of property owners liable to be assessed for delinquent fees. The board may make such revisions or corrections to the report as it deems just, after which, by resolution, the report shall be confirmed.

(4) The delinquent fees set forth in the report as confirmed shall constitute assessments against the respective parcels of land and are a lien on the property for the amount of such delinquent fees. A certified copy of the confirmed report shall be filed with the county clerk for the amounts of the respective assessments against the respective parcels of land as they appear on the current assessment roll. The lien created attaches upon recordation, in the office of the county clerk of the county in which the property is situated, of a certified copy of the resolution of confirmation. The assessment may be collected at the same time and in the same manner as ordinary county ad valorem property taxes are collected and shall be subject to the same penalties and the same procedure and sale in case of delinquency as provided for such taxes. All laws applicable to the levy, collection, and enforcement of county ad valorem property taxes shall be applicable to such assessment.

Any city collecting solid waste fees or charges may collect delinquent fees or charges for garbage and trash storage, collection and disposal in the manner provided for counties.

(b) In carrying out its responsibilities, any such city or county may adopt ordinances, resolutions, regulations and standards to implement an approved solid waste management plan, to conduct operations necessary to administer the plan and to carry out its purposes and provisions; and for the

storage, collection, transportation, processing and disposal of solid wastes and recyclables which shall be in conformity with the rules, regulations, standards and procedures adopted by the secretary for the storage, collection, transportation, processing and disposal of solid wastes and recyclables.

(c) Cities or counties may contract with any person, city, county, other political subdivision or state agency in this or other states to carry out their responsibilities to implement an approved solid waste management plan including any operations necessary to administer the plan and carry out its purposes and provisions; and for the collection, transportation, processing and disposal of solid wastes and recyclables.

History: L. 1970, ch. 264, § 10; L. 1972, ch. 239, § 1; L. 1974, ch. 257, § 1; L. 1974, ch. 352, § 163; L. 2004, ch. 163, § 4; L. 2009, ch. 117, § 1; July 1.

65-3410a. Cities; counties; solid waste plan restrictions. (a) Except as provided by subsection (b), no city or county shall adopt by ordinance, resolution or in a solid waste management plan under K.S.A. 65-3405 or 65-3410, and amendments thereto, restrictions for any solid waste disposal area within its boundaries if such restrictions supersede or impair the local legislation of another city or county being serviced by the same solid waste disposal area or require another city or county to adopt new solid waste management requirements not currently required by statewide rules and regulations.

(b) A city or county may adopt restrictions for a solid waste disposal area under subsection (a) if:

(1) The city or county owns the solid waste disposal area; and

(2) such restrictions apply to the residents of such city or county but not to residents of another city or county being serviced by the same solid waste disposal area.

(c) This section shall be part of and supplemental to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto.

(d) This section shall apply to any solid waste disposal area, including those in operation prior to July 1, 2014.

History: L. 2013, ch. 129, § 1; L. 2014, ch. 112, § 2; July 1.

65-3410b. Solid waste report; secretary of health and environment; certain legislative committees. (a) On or before January 1, 2014, the secretary of health and environment shall prepare, with review and input from operators of municipal solid waste landfills, haulers of solid waste, business and residential consumers of haulers of solid waste, cities and counties, a report on solid waste management in Kansas for the senate committee on ethics, elections and local government and the house committee on local government. The report shall include, but not be limited to, the following:

(1) A review of statutes, rules and regulations and policies on solid waste management, including, but not limited to, details on yard waste, recycling, generation rates, composting, precipitation, source reduction efforts, population, landfill capacity and gas recovery in landfills; and

(2) recommendations for legislative changes and estimates of the cost of the state of implementing such changes.

(b) This section shall be part of and supplemental to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto.

History: L. 2013, ch. 129, § 2; July 1.

65-3411. Orders to prevent pollution or hazard. If the secretary finds that the generation, accumulation, management or discharge of solid waste by any person is, or threatens to cause pollution of the land, air or waters of the state, or is a hazard to property in the area or to public health and safety, the secretary may order the person to alter the generation, accumulation or

management of the solid waste or to provide and implement such solid waste management system as will prevent or remove pollution or hazards. The secretary may order any person having a permit issued pursuant to this act and operating a public or commercial solid waste management system, or any part thereof, which the secretary finds suitable to manage the solid waste, to provide and implement a solid waste management system or part thereof to prevent or remove such pollution or hazard. Such order shall specify a fair compensation to the owner or permittee for property taken or used and shall specify the terms and conditions under which the permittee shall provide such solid waste management services. Such order shall specify the length of time, after receipt of the order during which the person or permittee shall provide or implement the solid waste management system or alter the generation accumulation or management of the solid waste.

History: L. 1970, ch. 264, § 11; L. 1974, ch. 352, § 164; L. 1977, ch. 221, § 5; L. 1981, ch. 251, § 25; L. 1986, ch. 318, § 97; July 1.

65-3412. Hearings in accordance with Kansas administrative procedure act; judicial review. Any person aggrieved by an order or disapproval of the secretary pursuant to K.S.A. 65-3411, and amendments thereto, may, within 15 days of service of the order, request in writing a hearing on the order. Hearings shall be conducted in accordance with the provisions of the Kansas administrative procedure act. Any action of the secretary pursuant to this section is subject to review in accordance with the Kansas judicial review act.

History: L. 1970, ch. 264, § 12; L. 1974, ch. 352, § 165; L. 1986, ch. 318, § 98; L. 1988, ch. 356, § 203; L. 2010, ch. 17, § 144; July 1.

65-3413. Designation of local agency to act as agent of secretary. The secretary may designate county, city-county and multicounty health departments to act as his or her agent in carrying out the provisions of this act under such terms and conditions as he or she shall prescribe.

History: L. 1970, ch. 264, § 13; L. 1974, ch. 352, § 166; L. 1980, ch. 182, § 28; July 1.

65-3414. Enforcement by county or district attorney. The county or district attorney of every county is hereby authorized and directed to file appropriate actions for enforcement of this act. The county or district attorney filing the action shall notify the secretary before filing the action.

History: L. 1970, ch. 264, § 14; L. 1974, ch. 352, § 167; L. 1997, ch. 140, § 7; July 1.

65-3415. Solid waste grants. (a) The secretary is authorized to assist counties, designated cities or regional solid waste management entities by administering grants to pay up to 60% of the costs of preparing and revising official plans for solid waste management systems in accordance with the requirements of this act and the rules and regulations and standards adopted pursuant to this act, and for carrying out related studies, surveys, investigations, inquiries, research and analyses.

(b) The secretary is authorized to assist counties, designated cities, municipalities, regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, colleges, universities, schools, state agencies or private entities, by administering competitive grants that pay up to 75% of eligible costs incurred by such a county, city, regional entity, college, university, school, state agency or private entity pursuant to an approved solid waste management plan, for any project related to the development and operation of recycling, source reduction, waste minimization and solid waste management public education programs. Such projects shall include, but not be limited to, the implementation of innovative waste processing technologies which demonstrate nontraditional methods to reduce waste volume by recovering materials or by converting the waste into usable by-

products or energy through chemical or physical processes. To be eligible for competitive grants awarded pursuant to this section, a county, designated city, regional entity, college, university, school, state agency or private entity must be implementing a project which is part of a solid waste management plan approved by the secretary or implementing a project with statewide significance as determined by the secretary with the advice and counsel of the solid waste grants advisory committee.

(c) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 60% of costs incurred by such a county, city or regional entity for:

(1) The development or enhancement of temporary and permanent household hazardous waste programs operated in accordance with K.S.A. 65-3460 and amendments thereto;

(2) the first year of operation following initial start-up of temporary and permanent household hazardous waste programs; and

(3) educating the public regarding changes in household hazardous waste collection program operations or services.

(d) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 75% of costs incurred by such a county, city or regional entity to develop and implement temporary agricultural pesticide collection programs.

(e) The secretary is authorized to assist counties, cities or regional solid waste management entities that are part of an interlocal agreement entered into pursuant to K.S.A. 12-2901 et seq. and amendments thereto or other applicable statutes, by administering grants that pay up to 75% of costs incurred by such a county, city, or regional entity to develop and implement exempt small quantity hazardous waste generator waste collection programs, subject to the following:

(1) The aggregate amount of all such grants made for a fiscal year shall not exceed $150,000; and

(2) no grantee shall receive any such grants in an aggregate amount exceeding $50,000.

(f) (1) Failure of any public or private entity to pay solid waste tonnage fees as required pursuant to K.S.A. 65-3415b, and amendments thereto, shall bar receipt of any grant funds by such entity until fees and related penalties have been paid.

(2) Failure of a county or regional authority to perform annual solid waste plan reviews and five year public hearings, and submit appropriate notification to the secretary that such actions have been carried out pursuant to K.S.A. 65-3405, and amendments thereto, shall bar receipt of any grant funds by any entity within the jurisdiction of such county or regional authority unless the grant would support a project expected to yield benefits to counties outside the jurisdiction of such county or regional authority.

(3) A city, county, regional authority, college, university, school, state agency or private entity shall not be eligible to receive grants authorized in K.S.A. 65-3415, and amendments thereto, if the department determines that such city, county, regional authority, college, university, school, state agency or private entity is operating in substantial violation of applicable solid and hazardous waste laws or rules and regulations.

(4) The secretary may establish additional minimum requirements for grant eligibility.

(g) If the secretary determines that a grant recipient has utilized grant moneys for purposes not authorized in the grant contract, the secretary may order the repayment of such moneys and cancel any remaining department commitments under the grant. If the grant recipient fails to comply with

the secretary's order, the secretary may initiate a civil action in district court to recover any unapproved expenditures, including administrative and legal expenses incurred to pursue such action. Recovered grant moneys or expenses shall be remitted to the state treasurer, who shall deposit the entire amount in the state treasury and credit it to the solid waste management fund.

(h) All grants shall be made in accordance with appropriation acts from moneys in the solid waste management fund created by K.S.A. 65-3415a and amendments thereto.

(i) Local match requirements for all solid waste grant programs may be met by in-kind contributions.

History: L. 1970, ch. 264, § 15; L. 1974, ch. 352, § 168; L. 1992, ch. 316, § 6; L. 1995, ch. 221, § 2; L. 1997, ch. 140, § 8; L. 2000, ch. 96, § 1; L. 2001, ch. 127, § 5; July 1.

65-3415a. Solid waste management fund. (a) There is hereby created in the state treasury the solid waste management fund.

(b) The secretary shall remit to the state treasurer, in accordance with the provisions of K.S.A. 75-4215, and amendments thereto, all moneys collected or received by the secretary from the following sources:

(1) Solid waste tonnage fees imposed pursuant to K.S.A. 65-3415b, and amendments thereto;

(2) application and annual fees provided for by K.S.A. 65-3407, and amendments thereto;

(3) gifts, grants, reimbursements or appropriations intended to be used for the purposes of the fund, but excluding federal grants and cooperative agreements; and

(4) any other moneys provided by law.

Upon receipt of each such remittance, the state treasurer shall deposit in the state treasury any amount remitted pursuant to this subsection to the credit of the solid waste management fund.

(c) Moneys in the solid waste management fund shall be expended for the following purposes:

(1) Grants to counties or groups of counties or designated city or cities pursuant to K.S.A. 65-3415, and amendments thereto;

(2) monitoring and investigating solid waste management plans of counties and groups of counties;

(3) payment of extraordinary costs related to monitoring permitted solid waste processing facilities and disposal areas, both during operation and after closure;

(4) payment of costs of postclosure cleanup of permitted solid waste disposal areas which, as a result of a postclosure occurrence, pose a substantial hazard to public health or safety or to the environment;

(5) emergency payment for costs of cleanup of solid waste disposal areas which were closed before the effective date of this act and which pose a substantial risk to the public health or safety or to the environment, but the total amount of such emergency payments during a fiscal year shall not exceed an amount equal to 50% of all amounts credited to the fund during the preceding fiscal year;

(6) payment for emergency action by the secretary as necessary or appropriate to assure that the public health or safety is not threatened whenever there is a release from a solid waste processing facility or a solid waste disposal area;

(7) payment for corrective action by the secretary at an active or closed solid waste processing facility or a solid waste disposal area where solid waste management activity has resulted in an actual or potential threat to human health or the environment, if the owner or operator has not been identified or is unable or unwilling to perform corrective action;

(8) payment of the administrative, technical and legal costs incurred by the secretary in carrying out the provisions of K.S.A. 65-3401through 65-3423, and amendments thereto, including the cost of any additional employees or increased general operating costs of the department attributable therefor;

(9) development of educational materials and programs for informing the public about solid waste issues;

(10) direct payments to reimburse counties or cities for household, farmer or exempt small quantity generator hazardous wastes generated from persons not served by existing household hazardous waste programs or direct payment of contractors for the disposal costs of such wastes;

(11) payment of costs associated with the solid waste grants advisory board pursuant to K.S.A. 65-3426, and amendments thereto;

(12) with the consent of the city or county, payment for the removal and disposal or on-site stabilization of solid waste which has been illegally dumped when the responsible party is unknown, unwilling or unable to perform the necessary corrective action, provided that: (A) Moneys in the fund shall be used to pay only 75% of the costs of such corrective action and the city or county shall pay the remaining 25% of such costs; and (B) not more than $10,000 per site shall be expended from the fund for such corrective action;

(13) payment of the costs to administer regional or statewide waste collection programs designed to remove hazardous materials and wastes from homes, farms, ranches, institutions and small businesses not generally covered by state or federal hazardous waste laws and rules and regulations; and

(14) payment for the disposal of household hazardous waste generated as a result of community clean-up activities following natural disasters such as floods and tornados.

(d) If the secretary determines that expenditures from the solid waste management fund are necessary to perform authorized corrective actions related to solid waste management activities, the person or persons responsible for illegal dumping activity or the operation or long-term care of a disposal area whose failure to comply with this act, rules and regulations promulgated thereunder, or permit conditions resulted in such determination, shall be responsible for the repayment of those amounts expended. The secretary shall take appropriate action to enforce this provision against any responsible person. If amounts are recovered for payment for corrective action pursuant to subsection (c)(12), 25% of the amount recovered shall be paid to the city or county that shared in the cost of the corrective action. Otherwise, the secretary shall remit any amounts recovered and collected in such action to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the solid waste management fund. Prior to initiating any corrective action activities authorized by this section, the secretary shall give written notice to the person or persons responsible for the waste to be cleaned up and to the property owner that the department will undertake corrective action if the responsible person or persons do not perform the necessary work within a specified time period. The department and its representatives are authorized to enter private property to perform corrective actions if the responsible party fails to perform required clean-up work but no such entry shall be made without the property owner's consent except upon notice and hearing in accordance with the Kansas administrative procedure act and a finding that the solid waste creates a public nuisance or adversely affects the public health or the environment.

(e) Expenditures from the solid waste management fund shall be made in accordance with appropriations acts upon warrants of the director of accounts and reports issued pursuant to vouchers approved by the secretary or a person designated by the secretary.

(f) On or before the 10th of each month, the director of accounts and reports shall transfer from the state general fund to the solid waste management fund interest earnings based on:

(1) The average daily balance of moneys in the solid waste management fund for the preceding month; and

(2) the net earnings rate of the pooled money investment portfolio for the preceding month.

(g) The solid waste management fund shall be used for the purposes set forth in this act and for no other governmental purposes. It is the intent of the legislature that the fund shall remain intact and inviolate for the purposes set forth in this act, and moneys in the fund shall not be subject to the provisions of K.S.A. 75-3722, 75-3725a and 75-3726a, and amendments thereto.

(h) The secretary shall prepare and deliver to the legislature on or before the first day of each regular legislative session, a report which summarizes all expenditures from the solid waste management fund, fund revenues and recommendations regarding the adequacy of the fund to support necessary solid waste management programs.

History: L. 1992, ch. 316, § 8; L. 1993, ch. 207, § 11; L. 1995, ch. 221, § 3; L. 1996, ch. 253, § 15; L. 1997, ch. 140, § 9; L. 2000, ch. 96, § 2; L. 2001, ch. 5, § 243; July 1.

65-3415b. Solid waste tonnage fees. (a) There is hereby imposed a state solid waste tonnage fee of $1.00 for each ton or equivalent volume of solid waste disposed of at any solid waste disposal area in this state other than solid waste enumerated in subsection (c) or solid waste disposal authorized by the secretary pursuant to subsection (a) of K.S.A. 65-3407c, and amendments thereto.

(b) There is hereby imposed a state solid waste tonnage fee of $1.00 for each ton or equivalent volume of solid waste transferred out of Kansas through a transfer station, other than waste enumerated in subsection (c).

(c) The fees imposed by this section shall not apply to:

(1) Any waste tire, as defined by K.S.A. 65-3424, and amendments thereto, disposed in or at a permitted solid waste disposal area;

(2) sludges from public drinking water supply treatment plants, when disposed of at a monofill permitted by the secretary;

(3) clean rubble;

(4) solid waste solely consisting of vegetation from land clearing and grubbing, utility maintenance and seasonal or storm-related cleanup but such exception shall not apply to yard waste;

(5) construction and demolition waste disposed of by the federal government, by the state of Kansas, or by any city, county or other unit of local government in the state of Kansas, or by any person on behalf thereof; and

(6) industrial waste disposed of at a solid waste disposal area which is permitted by the secretary, and is owned or operated by or for the industrial facility generating the waste and which is used only for industrial waste generated by such industrial facility.

(d) The operator of a solid waste disposal area or transfer station shall pay the fee imposed by this section.

(e) The secretary of health and environment shall administer, enforce and collect the fee imposed by this section. The secretary shall have the authority to waive such fee when large quantities of waste are generated due to major natural disasters such as floods, tornados and fires unless persons paying such fees are able to recover such fees from the federal government. Except as otherwise provided by subsections (a) and (b), all laws and rules and regulations of the secretary of revenue relating to the administration, enforcement and collection of the retailers' sales tax shall apply to such fee insofar as they can be made applicable. The secretary of health and environment shall adopt any other rules and regulations as necessary for the efficient and effective administration, enforcement and collection thereof.

(f) The secretary of health and environment shall remit all moneys collected from fees imposed pursuant to subsections (a) and (b) to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer

shall deposit the entire amount in the state treasury to the credit of the solid waste management fund created by K.S.A. 65-3415a, and amendments thereto.

History: L. 1992, ch. 316, § 9; L. 1993, ch. 274, § 3; L. 1995, ch. 221, § 5; L. 1997, ch. 140, § 10; L. 2000, ch. 96, § 3; L. 2001, ch. 5, § 244; L. 2002, ch. 101, § 2; L. 2006, ch. 53, § 3; April 6.

65-3415c.

History: L. 1992, ch. 316, § 10; Repealed, L. 1997, ch. 140, § 15; July 1.

65-3415d.

History: L. 1992, ch. 316, § 11; Repealed, L. 1993, ch. 274, § 7; May 6.

65-3415e. Fees on disposal at private disposal areas. (a) Except as provided by subsection (b), any county or group of counties operating a solid waste disposal area shall levy a charge on any solid waste, whether generated within or outside such county or counties, that is deposited at any privately owned solid waste disposal area located in such county or counties. The revenue from such charge may be used by the county or group of counties for the development and implementation of its solid waste management plan and the costs of closure and postclosure cleanup of solid waste disposal areas within the county or group of counties.

(b) The board of county commissioners of any county by unanimous vote may determine not to impose the fee provided for by subsection (a).

(c) Any charges imposed by counties under this section shall be in addition to any other fees, charges, franchise payments or taxes imposed for solid waste deposited at a solid waste disposal area. The secretary of health and environment shall make available to counties information as to the amounts paid by the operators of solid waste disposal areas under the provisions of K.S.A. 65-3415b and amendments thereto.

History: L. 1992, ch. 316, § 12; L. 1997, ch. 140, § 11; July 1.

65-3415f. Solid waste tonnage fees authorized to be imposed by counties; exceptions; collection and disposition of proceeds. (a) As used in this section, terms have the meanings provided by K.S.A. 65-3402 and amendments thereto.

(b) In addition to any other fee provided by law, the board of county commissioners of any county may impose, by resolution adopted pursuant to this section, a solid waste tonnage fee for each ton or equivalent volume of solid waste disposed of at any solid waste disposal area operated by such county. Such fees shall not apply to any solid waste exempted from the state solid waste tonnage fee imposed by K.S.A. 65-3415b, and amendments thereto.

(c) Fees imposed pursuant to this section shall be collected by the county and deposited in a special fund in the county treasury. All interest earned on moneys in the fund shall also be deposited in the fund. If there is more than one solid waste disposal area in the county where fees are imposed pursuant to this section, a separate fund for each such disposal area shall be maintained from the fees collected from such disposal area. Money in the fund shall be used only for payment of costs of closure, postclosure actions and contamination remediation associated with the solid waste disposal area until the secretary determines that all requirements for closure, postclosure actions and contamination remediation associated with the disposal area have been met.

(d) The board of county commissioners, by resolution, may modify, discontinue or reinstate the fee authorized by this section.

(e) Transfer or expenditure of moneys in a special fund provided for by this section for any purpose other than authorized by this section is a class A nonperson misdemeanor and constitutes grounds for forfeiture of public office.

(f) If two or more counties jointly operate a solid waste disposal area, the fee provided for by this section on solid waste disposed of at such disposal area may be imposed, modified, discontinued or reinstated only if a majority of the board of county commissioners of each county jointly operating the disposal area votes to impose, modify, discontinue or reinstate the fee.

History: L. 1994, ch. 283, § 4; L. 1997, ch. 140, § 12; L. 2002, ch. 101, § 3; May 23.

65-3416. Severability. The provisions of this act are severable and if any provision or part thereof shall be held invalid or unconstitutional or inapplicable to any person or circumstances, such invalidity, unconstitutionality or inapplicability shall not affect or impair the remaining provisions of the act.

History: L. 1970, ch. 264, § 16; July 1.

65-3416a. Severability. If any clause, sentence, section, provision, or part of this act shall be adjudged to be unconstitutional or invalid for any reason by any court of competent jurisdiction, such judgment shall not invalidate, impair, or affect the remainder of this act, which shall remain in full force and effect.

History: L. 1977, ch. 221, § 8; April 9.

65-3416b. Severability. If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

History: L. 1992, ch. 316, § 14; July 1.

65-3417. Solid waste plans and programs; considerations; judicial review of secretary's actions. (a) In developing solid waste plans or the implementation of a solid waste program in conformance with K.S.A. 65-3401 through 65-3415, and amendments thereto, and rules and regulations adopted thereunder, cities, counties or multiples or combinations thereof shall consider demographic and geographic differences within their area of jurisdiction in promulgating solid waste plans and programs, and the board shall consider the demographic and geographic variations in giving approval or denying approval of such plans and programs.

(b) Any action of the secretary pursuant to the provisions of article 34 of chapter 65 of the Kansas Statutes Annotated, and amendments thereto, is subject to review in accordance with the Kansas judicial review act.

History: L. 1973, ch. 257, § 1; L. 1975, ch. 462, § 104; L. 1986, ch. 318, § 99; L. 2010, ch. 17, § 145; July 1.

65-3418. Vesting of title to solid waste; liability of generator; authority of resource recovery facilities provided by cities or counties or combinations thereof; contracts. (a) Title to the solid waste collected, processed or disposed of in accordance with the provisions of this act and the rules and regulations adopted thereunder shall vest in the owner of the solid waste management activity, area or facility in which the solid waste is placed. Solid waste produced from a discrete source disposed of in ways other than in accordance with this act shall remain the property of the generator and the generator shall be liable for removal of the waste, restoration of the area in which the waste was disposed and to provide for lawful disposal of the waste. It shall not constitute a defense to the generator that the generator acted through an independent contractor in the transportation or disposal of the solid waste.

(b) When a city or a county or any combination of cities or counties, or both, provides by contract for a resource recovery facility or facilities to recover materials or energy from solid wastes

as a part of an approved solid waste management plan, the resource recovery facility or facilities shall have sole ownership, utilization and disbursement control of all waste collected by that facility or facilities or delivered to that facility or facilities and shall have the power to sell recovered or recycled materials or energy. Such provision shall be interpreted to include either active participation and financial support of such resource recovery facility or facilities or oversight and regulatory control of such facility or facilities by the local governments. A resource recovery facility may contract to dispose of materials or products as allowed by rules and regulations of the secretary adopted pursuant to K.S.A. 65-3401 et seq., and amendments thereto and conditions as set by the original owner of such materials delivered for disposal and resource recovery, so as to avoid reuse or resale of such special products or materials. Nothing herein shall be construed to prohibit or limit private waste collectors from extracting from the waste they collect, prior to delivery to the resource recovery facility, any materials that may have value to such collectors for purposes of recycling, reuse or resale.

History: L. 1977, ch. 221, § 6; L. 1981, ch. 251, § 26; L. 1984, ch. 239, § 1; July 1.

65-3419. Violations of act; penalties; procedure; injunctions. (a) Any person who violates any provision of subsection (a) of K.S.A. 65-3409, and amendments thereto, shall incur, in addition to any other penalty provided by law, a civil penalty in an amount of up to $5,000 for every such violation and, in the case of a continuing violation, every day such violation continues shall be deemed a separate violation.

(b) The director of the division of environment, upon a finding that a person has violated any provision of subsection (a) of K.S.A. 65-3409, and amendments thereto, may impose a penalty within the limits provided in this section, which penalty shall constitute an actual and substantial economic deterrent to the violation for which it is assessed.

(c) No penalty shall be imposed pursuant to this section except upon the written order of the director of the division of environment to the person who committed the violation. Such order shall state the violation, the penalty to be imposed and the right of such person to appeal to a hearing before the secretary of health and environment. Any such person may, within 15 days after service of the order, make written request to the secretary for a hearing thereon. Hearings under this subsection shall be conducted in accordance with the provisions of the Kansas administrative procedure act.

(d) Any action of the secretary pursuant to subsection (c) is subject to review in accordance with the Kansas judicial review act.

(e) Notwithstanding any other provision of this act, the secretary, upon receipt of information that the storage, transportation, processing, treatment or disposal of any waste may present a substantial hazard to the health of persons or to the environment or for a threatened or actual violation of this act or rules and regulations adopted pursuant thereto, or any orders issued pursuant thereto, or any permit conditions required thereby, may take such action as the secretary determines to be necessary to protect the health of such persons or the environment. The action the secretary may take shall include, but not be limited to:

(1) Issuing an order directing the owner, generator, transporter or the operator of the processing, treatment or disposal facility or site, or the custodian of the waste, which constitutes such hazard or threatened or actual violation, to take such steps as are necessary to prevent the act or eliminate the practice which constitutes such hazard. Such action may include, with respect to a facility or site, permanent or temporary cessation of operation.

(2) Commencing an action to enjoin acts or practices specified in paragraph (1) or requesting that the attorney general or appropriate district or county attorney commence an action to enjoin those acts or practices or threatened acts or practices. Upon a showing by the secretary that a person has engaged in those acts or practices or intends to engage in those acts or practices, a permanent or

temporary injunction, restraining order or other order may be granted by any court of competent jurisdiction. An action for injunction under this paragraph (2) shall have precedence over other cases in respect to order of trial.

(3) Applying to the district court in the county in which an order of the secretary under paragraph (1) will take effect, in whole or in part, for an order of that court directing compliance with the order of the secretary. Failure to obey the court order shall be punishable as contempt of the court issuing the order. The application under this paragraph (3) for a court order shall have precedence over other cases in respect to order of trial.

(f) In any civil action brought pursuant to this section in which a temporary restraining order, preliminary injunction or permanent injunction is sought, it shall not be necessary to allege or prove at any stage of the proceeding that irreparable damage will occur should the temporary restraining order, preliminary injunction or permanent injunction not be issued or that the remedy at law is inadequate, and the temporary restraining order, preliminary injunction or permanent injunction shall issue without such allegations and without such proof.

History: L. 1977, ch. 221, § 7; L. 1986, ch. 318, § 100; L. 1988, ch. 356, § 204; L. 1989, ch. 186, § 31; L. 1992, ch. 316, § 7; L. 2010, ch. 17, § 146; July 1.

65-3420.

History: L. 1979, ch. 202, § 6; Repealed, L. 1981, ch. 251, § 28; July 1.

65-3421. Resource recovery facilities provided by cities or counties; contracts. When a city or a county or combination of cities or counties provides for a facility or facilities to recover materials or energy as a part of an approved solid waste management plan, any city, county or state agency may enter into a long-term contract to supply solid waste to the resource recovery facility or facilities; to construct, operate and maintain or construct or operate or maintain such facilities; to contract with a private entity for the construction, operation and maintenance of such facilities; to market materials or energy recovered from such facility or facilities; or to utilize such facility or facilities to conserve materials or energy by reducing the volume of solid waste. For the purpose of this section "long-term" shall mean a period of not less than 10 nor more than 30 years. All long-term contracts negotiated under this section shall be reviewed and approved by the attorney general before becoming effective.

History: L. 1981, ch. 251, § 27; L. 1984, ch. 239, § 2; July 1.

65-3422.

History: L. 1984, ch. 239, § 3; Repealed, L. 1997, ch. 140, § 15; July 1.

65-3423. Same; contracts with private persons for performance of certain functions; authority of private entities. (a) When a city or a county or any combination of cities or counties, or both, provides for a facility or facilities to recover materials or energy as a part of an approved solid waste management plan, the city or county or the separate legal entity created to govern the combination of cities or counties, or both, if such an entity exists, may enter into contracts with private persons for the performance of any such functions of the plan which, in the opinion of the city or county or such separate legal entity, can desirably and conveniently be carried out by a private person under contract provided any such contract shall contain such terms and conditions as will enable the city or county or such separate legal entity to retain overall supervision and control of the business, design, operating management, transportation, marketing, planning and research and development functions to be carried out or to be performed by such private persons pursuant to such

contract. Such contracts may be entered into either on a negotiated or an open-bid basis, and the city or county or such separate legal entity in its discretion may select the type of contract it deems most prudent to utilize considering the scope of work, the management complexities associated therewith, the extent of current and future technological development requirements and the best interests of the state.

(b) Private entities may construct, operate, maintain and own resource recovery facilities; form contracts to supply solid waste to the resource recovery facility or facilities; form contracts to market materials or energy recovered from such facility or facilities; or utilize such facility or facilities to conserve materials or energy by reducing the volume of solid waste under the supervision of and with the approval of the city or county or such separate legal entity, subject to the approval of the Kansas department of health and environment, and in accordance with the approved local solid waste management plan.

History: L. 1984, ch. 239, § 4; July 1.

65-3424. Definitions. As used in K.S.A. 65-3424 through 65-3424i, and amendments thereto, unless the context otherwise requires:

(a) Terms have the meaning provided by K.S.A. 65-3402, and amendments thereto.

(b) "Abatement" means the processing or removing to an approved storage site of waste tires which are creating a danger or nuisance.

(c) "Beneficial use" means the use or storage of waste tires in a way that:

(1) Creates an on-site economic benefit to the owner of the tires, including, but not limited to, bumpers for boat docks or boats, playground equipment, silo covers, traffic control, feed bunks, water tanks, windbreaks constructed of baled tires or in a manner consistent with rules and regulations of the secretary, erosion control on the face of an earthen dam and stabilization of soil or sand blow-outs caused by wind; and

(2) as determined by the secretary, causes no adverse impacts to human health or the environment and complies with all applicable zoning requirements.

(d) "Contaminated waste tire" means a tire which, as determined in accordance with rules and regulations adopted by the secretary, is recovered in a project to abate a waste tire accumulation and is so coated by or filled with dirt, mud, sludge or other natural substances as to render the tire substantially unsuitable for processing.

(e) "Illegal waste tire accumulation" means any waste tire pile containing more than 50 waste tires except the following:

(1) A waste tire accumulation on the premises of a facility which has been issued a permit by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto, and managed in accordance with the conditions of such permit; or

(2) a waste tire accumulation which is exempt from the waste tire collection center permit requirement pursuant to K.S.A. 65-3424b, and amendments thereto.

(f) "Mobile waste tire processor" means a person who processes waste tires at other than a fixed site.

(g) "Process" means: (1) Cut or otherwise alter whole waste tires so that they are no longer whole; or (2) bale for disposal or beneficial use.

(h) "Store" or "storage" means the placing of waste tires in a manner that does not constitute disposal of the waste tires. Storage includes the beneficial use of waste tires as silo covers and such other beneficial uses as the secretary determines do not create health or environmental risks.

(i) "Tire" means a continuous solid or pneumatic rubber covering used to encircle the wheel of a vehicle or aircraft, or an innertube of such a covering.

(j) "Tire retailer" means a person in the business of selling new or used replacement tires at retail.

(k) "Used tire" means a tire that: (1) Has been removed from a wheel following a period of use or remains on a wheel removed from a vehicle or aircraft following a period of use; and (2) has been determined to have value in accordance with rules and regulations established pursuant to subsection (e)(7) of K.S.A. 65-3424b, and amendments thereto.

(l) "Vehicle" has the meaning provided by K.S.A. 8-1485, and amendments thereto, and includes implements of husbandry, as defined by K.S.A. 8-1427, and amendments thereto.

(m) "Waste tire" means a whole tire that: (1) Has been removed from a wheel following a period of use or remains on a wheel removed from a vehicle or aircraft following a period of use; and (2) is no longer suitable for its original intended purpose because of wear, damage or defect.

(n) "Waste tire collection center" means a site where used or waste tires are collected from the public or from customers of a business prior to being offered for recycling or disposal.

(o) "Waste tire processing facility" means a fixed site where equipment is used to process waste tires.

History: L. 1990, ch. 319, § 1; L. 1991, ch. 197, § 1; L. 1996, ch. 173, § 1; L. 2000, ch. 103, § 1; L. 2001, ch. 126, § 1; L. 2003, ch. 130, § 16; July 1.

65-3424a. Restrictions on disposal. No person shall:

(a) Maintain an illegal waste tire accumulation;

(b) transfer ownership of waste tires to any person unless the recipient: (1) Has been issued a permit by the secretary pursuant to K.S.A. 65-3407, and amendments thereto, or K.S.A. 65-3424b, and amendments thereto; (2) intends to use the waste tires for a beneficial use; or (3) is a tire retailer who collects waste tires from the public or other tire retailers in the ordinary course of business;

(c) deposit waste tires in a landfill as a method of ultimate disposal, except that the secretary may authorize, by rules and regulations or by permits issued pursuant to K.S.A. 65-3407, and amendments thereto: (A) The final disposal of processed waste tires at permitted municipal solid waste landfills and permitted waste tire monofills; (B) the final disposal of contaminated whole, unprocessed waste tires at permitted municipal solid waste landfills and permitted waste tire monofills; (C) the use of waste tires in their original state as part of or supplemental to a proven and approved leachate collection system at a landfill; (D) the use of waste tires which have been cut into two or more parts as daily cover material for a landfill; or (E) the final disposal of small numbers of whole, unprocessed waste tires in landfills if such tires are intermingled with other solid waste and retrieval of such tires would be hazardous; or

(d) receive money in exchange for waste tires unless: (A) The person holds a permit issued by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto; or (B) the person is a tire retailer who collects waste tires from the public or from other tire retailers in the ordinary course of business.

History: L. 1990, ch. 319, § 2; L. 1991, ch. 197, § 2; L. 1994, ch. 283, § 5; L. 1996, ch. 173, § 2; L. 2000, ch. 103, § 2; L. 2001, ch. 126, § 2; L. 2003, ch. 130, § 17; July 1.

65-3424b. Permits and standards. (a) The secretary shall establish a system of permits for mobile waste tire processors, waste tire processing facilities, waste tire transporters and waste tire collection centers. Such permits shall be issued for a period of one year and shall require an application fee established by the secretary in an amount not exceeding $250 per year.

(b) The secretary shall adopt rules and regulations establishing standards for mobile waste tire processors, waste tire processing facilities, waste tire collection centers and waste tire transporters.

Such standards shall include a requirement that the permittee file with the secretary a bond or other financial assurance in an amount determined by the secretary to be sufficient to pay any costs which may be incurred by the state to process any waste tires or dispose of any waste tires or processed waste tires if the permittee ceases business or fails to comply with this act.

(c) Any person who contracts or arranges with another person to collect or transport waste tires for storage, processing or disposal shall so contract or arrange only with a person holding a permit from the secretary. Any person contracting or arranging with a person, permitted by the secretary, to collect or transport waste tires for storage, processing or, disposal, transfers ownership of those waste tires to the permitted person and the person contracting or arranging with the person holding such permit to collect or transport such tires shall be released from liability therefor. Any person contracting or arranging with any person, for the collection, transportation, storage, processing, disposal or beneficial use of such tires shall maintain a record of such transaction for a period of not less than three years following the date of the transfer of such tires. Record-keeping requirements for beneficial use shall not apply when tire retailers allow customers to retain their old tires at the time of sale.

(d) The owner or operator of each site that contains a waste tire, used tire or new tire accumulation of any size must control mosquito breeding and other disease vectors.

(e) No person shall own or operate a waste tire processing facility or waste tire collection center or act as a mobile waste tire processor or waste tire transporter unless such person holds a valid permit issued therefor pursuant to subsection (a), except that:

(1) A tire retreading business where fewer than 1,500 waste tires are kept on the business premises may operate a waste tire collection center on the premises;

(2) a business that, in the ordinary course of business, removes tires from motor vehicles where fewer than 1,500 of these tires are kept on the business premises may operate a waste tire collection center or a waste tire processing facility or both on the premises;

(3) a retail tire-selling business where fewer than 1,500 waste tires are kept on the business premises may operate a waste tire collection center or a waste tire processing facility or both on the premises;

(4) the Kansas department of wildlife, parks and tourism may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate a waste tire collection center on the premises of any state park, state wildlife area or state fishing lake; (B) operate a waste tire processing facility on the premises of any state park, state wildlife area or state fishing lake; or (C) act as a waste tire transporter to transport waste tires to any state park, state wildlife area or state fishing lake;

(5) a person engaged in a farming or ranching activity, including the operation of a feedlot as defined by K.S.A. 47-1501, and amendments thereto, may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate an on-site waste tire collection center; (B) operate an on-site waste tire processing facility; or (C) act as a waste tire transporter to transport waste tires to the farm, ranch or the feedlot;

(6) a watershed district may perform one or more of the following to facilitate a beneficial use of waste tires: (A) Operate a waste tire collection center on the premises of a watershed district project or work of improvement; (B) operate a waste tire processing facility on the district's property; or (C) act as a waste tire transporter to transport waste tires to the district's property;

(7) a person may operate a waste tire collection center if: (A) Fewer than 1,500 used tires are kept on the premises; or (B) 1,500 or more used tires are kept on the premises, if the owner demonstrates through sales and inventory records that such tires have value, as established in accordance with standards adopted by rules and regulations of the secretary;

(8) local units of government managing waste tires at solid waste processing facilities or solid waste disposal areas permitted by the secretary under the authority of K.S.A. 65-3407, and amendments thereto, may perform one or more of the following in accordance with the conditions of the solid waste permit: (A) Operate a waste tire collection center on the premises of the permitted facility; (B) operate a waste tire processing facility on the premises of the permitted facility; (C) act as a waste tire transporter to transport waste tires to the permitted facility; or (D) act as a mobile waste tire processor;

(9) a person may act as a waste tire transporter to transport: (A) Waste tires mixed with other municipal solid waste; (B) fewer than five waste tires for lawful disposal; (C) waste tires generated by the business, farming activities of the person or the person's employer; (D) waste tires for a beneficial use approved by statute, rules and regulations, or by the secretary; (E) waste tires from an illegal waste tire accumulation to a person who has been issued a permit by the secretary pursuant to K.S.A. 65-3407 or 65-3424b, and amendments thereto, provided approval has been obtained from the secretary; or (F) five to 50 waste tires for lawful disposal, provided the transportation act is a one time occurrence to abate a legal accumulation of waste tires; or

(10) a tire retailer that in the ordinary course of business also serves as a tire wholesaler to other tire retailers may act as a waste tire transporter to transport waste tires from those retailers back to a central location owned or operated by the wholesaler for consolidation and final disposal or recycling.

(f) All fees collected by the secretary pursuant to this section shall be remitted to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund.

History: L. 1990, ch. 319, § 3; L. 1991, ch. 197, § 3; L. 1996, ch. 173, § 3; L. 2001, ch. 5, § 245; L. 2001, ch. 167, § 3; L. 2003, ch. 130, § 18; L. 2012, ch. 47, § 86; July 1.

65-3424c.

History: L. 1990, ch. 319, § 4; Repealed, L. 1991, ch. 197, § 9; July 1.

65-3424d. Tax on new tire sales. (a) In addition to any other tax imposed upon the retail sale of new vehicle tires, there is hereby imposed on retail sales of new vehicle tires (excluding innertubes), including new tires mounted on a vehicle sold at retail for the first time, an excise tax of $.25 per vehicle tire. Such tax shall be paid by the purchaser of such tires and collected by the retailer thereof.

(b) The tax imposed by this section collected by the retailer shall become due and payable as follows: When the total tax for which any retailer is liable under this act does not exceed the sum of $80 in any calendar year, the retailer shall file an annual return on or before January 25 of the following year; when the total tax liability does not exceed $1,600 in any calendar year, the retailer shall file returns quarterly on or before the 25th day of the month following the end of each calendar quarter; when the total tax liability exceeds $1,600 in any calendar year, the retailer shall file a return for each month on or before the 25th day of the following month. Each person collecting the tax imposed pursuant to this section shall make a true report to the department of revenue, on a form prescribed by the secretary of revenue, providing such information as may be necessary to determine the amounts of taxes due and payable hereunder for the applicable month or months, which report shall be accompanied by the tax disclosed thereby. Records of sales of new tires shall be kept separate and apart from the records of other retail sales made by the person charged to collect the tax imposed pursuant to this section in order to facilitate the examination of books and records as provided herein.

(c) The secretary of revenue or the secretary's authorized representative shall have the right at all reasonable times during business hours to make such examination and inspection of the books and records of the person required to collect the tax imposed pursuant to this section as may be necessary to determine the accuracy of such reports required hereunder.

(d) The secretary of revenue is hereby authorized to administer and collect the tax imposed by this section and to adopt such rules and regulations as may be necessary for the efficient and effective administration and enforcement of the collection thereof. Whenever any person liable to collect the taxes imposed hereunder refuses or neglects to pay them, the amount, including any penalty, shall be collected in the manner prescribed for the collection of the retailers' sales tax by K.S.A. 79-3617, and amendments thereto.

(e) The secretary of revenue shall remit all revenue collected under the provisions of this section to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund.

(f) Whenever, in the judgment of the secretary of revenue, it is necessary, in order to secure the collection of any taxes, penalties or interest due, or to become due, under the provisions of this act, the secretary may require any person charged with the collection of such tax to file a bond with the director of taxation under conditions established by and in such form and amount as prescribed by rules and regulations adopted by the secretary.

(g) The secretary of revenue and the secretary of health and environment shall cooperate to: (1) Ensure that retailers required to collect the tax imposed by this section collect such tax on sales of tires for all vehicles, as defined by K.S.A. 65-3424, and amendments thereto; and (2) develop and distribute to tire retailers educational materials that emphasize appropriate waste tire management practices.

History: L. 1990, ch. 319, § 5; L. 1991, ch. 197, § 4; L. 1992, ch. 50, § 1; L. 1993, ch. 52, § 1; L. 1996, ch. 173, § 4; L. 2001, ch. 5, § 246; L. 2001, ch. 167, § 4; July 1.

65-3424e. Same; failure to pay tax; penalties. (a) If any person fails to pay taxes when required by K.S.A. 65-3424d, there shall be added to the unpaid balance of the fees interest at the rate per month prescribed by subsection (a) of K.S.A. 79-2968 and amendments thereto from the date taxes were due until paid.

(b) If any person due to negligence or intentional disregard fails to file a report or pay the taxes due at the time required by or under the provisions of K.S.A. 65-3424d, there shall be added to the tax a penalty in an amount equal to 10% of the unpaid balance of taxes due.

(c) If any person fails to make a report, or to pay any taxes, within 60 days from the date the report or taxes were due, except in the case of an extension of time granted by the secretary of revenue, there shall be added to the taxes due a penalty equal to 25% of the amount of such tax.

(d) If any person, with fraudulent intent, fails to pay any tax or make, render or sign any report, or to supply any information, within the time required by or under the provisions of K.S.A. 65-3424d, there shall be added to the tax a penalty in an amount equal to 50% of the unpaid balance of the tax due.

(e) Penalty or interest applied under the provisions of subsections (a) and (d) shall be in addition to the penalty added under any other provisions of this section, but the provisions of subsections (b) and (c) shall be mutually exclusive of each other.

(f) Whenever, in the judgment of the secretary of revenue, the failure of a person to comply with the provisions of subsection (b) or (c) was due to reasonable causes and not willful neglect, the

secretary of revenue may waive or reduce any of the penalties upon making a record of the reasons therefor.

(g) In addition to all other penalties provided by this section, any person who willfully fails to make a report or to pay over any tax imposed under K.S.A. 65-3424d, who makes a false or fraudulent report, who fails to keep any books or records necessary to determine the accuracy of the person's reports, who willfully violates any rules and regulations of the secretary of revenue for the enforcement and administration of the provisions of K.S.A. 65-3424d or this section, who aids and abets another in attempting to evade the payment of any tax imposed by K.S.A. 65-3424d or who violates any other provision of K.S.A. 65-3424d or this section shall, upon conviction thereof, be fined not less than $100 nor more than $1,000, or be imprisoned in the county jail not less than one month nor more than six months, or be both so fined and imprisoned, in the discretion of the court.

History: L. 1990, ch. 319, § 6; July 1.

65-3424f.

History: L. 1990, ch. 319, § 7; L. 1991, ch. 197, § 5; L. 1994, ch. 283, § 6; L. 1996, ch. 173, § 5; L. 2000, ch. 103, § 3; Repealed, L. 2001, ch. 126, § 9; July 1.

65-3424g. Waste tire management fund. (a) There is hereby established in the state treasury the waste tire management fund.

(b) Money from the following sources shall be credited to the waste tire management fund:

(1) Revenue collected from the excise tax by K.S.A. 65-3424d, and amendments thereto;

(2) permit application and renewal fees provided for by K.S.A. 65-3424b, and amendments thereto;

(3) interest provided for by subsection (f);

(4) additional sources of funding such as reimbursements and appropriations intended to be used for the purposes of the fund;

(5) any recoveries from abatement and enforcement actions provided for by K.S.A. 65-3424k, and amendments thereto; and

(6) any other moneys provided by law.

(c) Moneys in the waste tire management fund shall be used only for the purpose of:

(1) Paying compensation and other expenses of employing personnel to carry out the duties of the secretary pursuant to K.S.A. 65-3424 through 65-3424h, and amendments thereto, but not more than $250,000;

(2) action by the department to implement interim measures to minimize nuisances or risks to public health or the environment that are or could be created by waste tire accumulations, until the responsible party can fully abate the site or until a state clean-up occurs pursuant to K.S.A. 65-3424k, and amendments thereto;

(3) action by the department to pay for the removal and disposal or on-site stabilization of waste tires which have been illegally accumulated or illegally managed, when the responsible party is unknown or unwilling or unable to perform the necessary corrective action;

(4) the costs of using contractors to provide: (A) Public education regarding proper management of waste tires; (B) technical training of persons on the requirements of solid waste laws and rules and regulations relating to waste tires; and (C) services described in subsection (i) of K.S.A. 65-3424k, and amendments thereto;

(5) grants to public or private entities for up to 50% of the cost to start-up or enhance projects to recycle waste tires or recover energy through waste tire combustion; and

(6) grants to local units of government and any public or private school for grades kindergarten through twelve to pay up to 50% of the costs to purchase tire derived products made from recycled waste tires. As used in this section, "tire derived products" means athletic field surfacing, playground cover, horticulture products and molded or extruded rubber products made from recycled waste tires.

(d) All grant applications received for waste tire recycling grants shall be reviewed by the solid waste grants advisory committee established pursuant to K.S.A. 65-3426, and amendments thereto. Waste tire recycling grants shall be subject to the requirements set forth in subsection (g) of K.S.A. 65-3415, and amendments thereto, related to the misuse of grant funds with the exception that any grant funds recovered by the secretary shall be deposited to the waste tire management fund. Waste tire management funds shall be used only for waste tire recycling grants. Waste tire grants shall not be awarded, nor shall waste tire funds be disbursed to a grant recipient, if the department determines that the grant applicant or recipient is operating in substantial violation of applicable environmental laws or regulations administered by the department.

(e) All expenditures from the waste tire management fund shall be made in accordance with appropriations acts upon warrants of the director of accounts and reports issued pursuant to vouchers approved by the secretary.

(f) On or before the 10th of each month, the director of accounts and reports shall transfer from the state general fund to the waste tire management fund interest earnings based on: (1) The average daily balance of moneys in the waste tire management fund for the preceding month; and (2) the net earnings rate for the pooled money investment portfolio for the preceding month.

History: L. 1990, ch. 319, § 8; L. 1991, ch. 197, § 7; L. 1994, ch. 283, § 7; L. 1996, ch. 253, § 38; L. 2000, ch. 103, § 4; L. 2001, ch. 126, § 5; L. 2003, ch. 130, § 19; L. 2007, ch. 118, § 1; L. 2009, ch. 117, § 2; July 1.

65-3424h. Same; rules and regulations. The secretary shall adopt such rules and regulations as necessary to administer and enforce the provisions of this act.

History: L. 1990, ch. 319, § 9; July 1.

65-3424i. Tire retailers; requirements. (a) Except as provided by subsection (b), no tire retailer shall refuse to accept waste tires from customers.

(b) A tire retailer may: (1) Ask customers if they wish to retain their old tires at the time of sale; (2) refuse to accept more tires from a customer than purchased by that customer at the time of sale; or (3) refuse to accept waste tires from a customer purchasing replacement tires for commercial use if the tire retailer does not mount such replacement tires.

(c) Tire retailers shall prominently display or make available to customers educational materials provided by the department of health and environment and department of revenue relating to proper waste tire management practices.

History: L. 1991, ch. 197, § 6; L. 1996, ch. 173, § 8; July 1.

65-3424j.

History: L. 1990, ch. 319, § 5; L. 1991, ch. 197, § 4; L. 1992, ch. 50, § 1; L. 1993, ch. 274, § 6; Repealed, L. 1994, ch. 283, § 10; May 5.

65-3424k. Abatement and enforcement actions by secretary. (a) The secretary may undertake appropriate abatement action and may enter into contracts for the abatement of illegal waste tires accumulations or illegally managed waste tires utilizing funds from the waste tire management fund.

(b) Any authorized representative of the secretary may enter, at reasonable times and upon written notice, onto any property or premises where an accumulation of waste tires is located to conduct: (1) An inspection and site assessment to determine whether the accumulation creates a nuisance or risk to public health and safety or to the environment; or (2) interim measures to minimize risk to public health and safety or to the environment.

(c) Whenever the secretary has reason to believe that an accumulation of waste tires creates a nuisance or risk to public health and safety or to the environment or is in violation of rules and regulations adopted by the secretary or conditions of a permit issued by the secretary, the secretary may require the person or persons responsible for the accumulation to carry out abatement activities. Such abatement activities shall be performed in accordance with a plan approved by the secretary. The secretary shall give notice, by letter, to the property owner and responsible parties that the waste tires constitute a nuisance or risk to public health or the environment, and that the waste tire accumulation must be abated within a specified period. The secretary may undertake abatement action utilizing funds from the waste tire management fund if the responsible parties fail to take the required action within the time period specified in the notice.

(d) The department and its representatives are authorized to enter private property to perform abatement activities if the responsible party fails to perform required clean-up work, but no entry shall be made without the property owner's consent except upon notice and hearing in accordance with the Kansas administrative procedure act.

(e) All costs incurred by the secretary in the abatement of illegal waste tires accumulations or illegally managed waste tires or in performing interim measures, including administrative and legal expenses, are recoverable from a responsible party or parties and may be recovered in a civil action in district court brought by the secretary. Any abatement costs recovered under this section shall be remitted to the state treasurer in accordance with the provisions of K.S.A. 75-4215, and amendments thereto. Upon receipt of each such remittance, the state treasurer shall deposit the entire amount in the state treasury to the credit of the waste tire management fund. An action to recover abatement or interim measures costs may be commenced at any stage of an abatement.

(f) In performing or entering contracts for abatement actions under this section, the secretary shall give preference to actions that recycle waste tires or burn waste tires for energy recovery. Direct abatement expenditures may include landfilling when waste tires are contaminated or when feasible in-state markets cannot be identified.

(g) Permits granted by the secretary pursuant to K.S.A. 65-3424b, and amendments thereto, shall not be transferable and may be revoked or suspended whenever the secretary determines that the permit holder is operating in violation of this act or rules and regulations adopted pursuant to the act; is creating or threatens to create a hazard to persons, property or the environment; or is creating or threatens to create a public nuisance. The secretary may also revoke, suspend or refuse to issue a permit when the secretary determines that past or continuing violations of the provisions of K.S.A. 65-3409, and amendments thereto, have been committed by the applicant or permit holder.

(h) Neither the state of Kansas nor the waste tire management fund shall be liable to any owner, operator or responsible party for the loss of business, damages or taking of property associated with any abatement or enforcement action taken pursuant to this section.

(i) The secretary shall enter into contracts with one or more associations of tire retailers to: (1) Assist in disseminating information to all tire retailers on the requirements of solid waste laws and rules and regulations relating to waste tires; (2) establish a point of contact for persons requesting information on solid waste laws and rules and regulations relating to waste tires; (3) assist in planning and implementing conferences, workshops, and other requested training events for persons involved in the generation, transportation, processing, or disposal of waste tires; and (4) assemble and analyze data on waste tire management by tire retailers in Kansas.

History: L. 1994, ch. 283, § 8; L. 1996, ch. 173, § 9; L. 2001, ch. 126, § 6; L. 2001, ch. 167, § 5; L. 2003, ch. 130, § 20; July 1.

65-3424l. Vehicle tire disposal; hearings and review of orders and decisions of secretary. (a) Any person adversely affected by any order or decision of the secretary pursuant to K.S.A. 65-3424 through 65-3424i, and amendments thereto, may, within 15 days of service of the order or decision, request in writing a hearing. Hearings under this section shall be conducted in accordance with the provisions of the Kansas administrative procedure act.

(b) Any person adversely affected by any action of the secretary pursuant to this act may obtain review of such action in accordance with the Kansas judicial review act.

History: L. 1994, ch. 283, § 9; L. 2010, ch. 17, § 147; July 1.

65-3424m.

History: L. 1996, ch. 173, § 6; L. 2000, ch. 103, § 5; L. 2001, ch. 126, § 7; Repealed, L. 2003, ch. 130, § 22; July 1.

65-3425. Plastic bottles and containers; labeling requirements; violations; penalties. (a) As used in this section:

(1) "Code" means a molded, imprinted or raised symbol.

(2) "Person" means any individual, association, partnership, limited partnership, corporation or other entity.

(3) "Plastic" means any material made of polymeric organic compounds and additives that can be shaped by flow.

(4) "Plastic bottle" means a plastic container which: (A) Has a neck that is smaller than the body of the container; (B) accepts a screw-type, snap-cap or other closure; and (C) has a capacity of 16 fluid ounces or more but less than five gallons.

(5) "Rigid plastic container" means any formed or molded container other than a bottle, intended for single use, composed predominantly of plastic resin and having a relatively inflexible finite shape or form with a capacity of eight ounces or more but less than five gallons.

(b) No person shall distribute, sell or offer for sale in this state any plastic bottle or rigid plastic container, unless it is labeled with a nationally recognized code indicating the plastic resin used to produce the bottle or container. The nationally recognized code shall appear on or near the bottom of the bottle or container.

(c) If the attorney general or county or district attorney has reason to believe that a person is violating the provisions of this section, the attorney general or county or district attorney shall give the person written notice thereof. If, after such notice is given, the attorney general or county or district attorney has reason to believe that the person is continuing to violate the provisions of this section, the attorney general or county or district attorney may bring an action to enjoin the violation and to recover a civil penalty of $50 for each violation but not exceeding a total of $500. Any such penalty recovered by the attorney general shall be deposited in the state treasury and credited to the state general fund. Any such penalty recovered by the county or district attorney shall be deposited in the general fund of the county in which the violation occurred.

History: L. 1993, ch. 57, § 1; L. 2014, ch. 112, § 1; July 1.

65-3426. Solid waste grants advisory committee. (a) There is hereby established within the department of health and environment the solid waste grants advisory committee, which shall be composed of eight members as follows:

(1) Seven members appointed by the governor, two of whom shall represent the interests of regional solid waste management entities, two of whom shall represent the interests of counties, one of whom shall represent the interests of cities, one of whom shall represent the interests of waste tire generators or handlers and one of whom shall represent the interests of the private sector;

(2) the secretary of health and environment or the secretary's designee.

(b) Appointive members of the solid waste grants advisory committee shall serve terms of two years. The secretary of health and environment or the person designated by the secretary shall serve as chairperson of the advisory committee.

(c) Members of the solid waste grants advisory committee shall receive amounts provided by subsection (e) of K.S.A. 75-3223, and amendments thereto, for each day of actual attendance at any meeting of the advisory committee or any subcommittee meeting authorized by the advisory committee.

(d) The secretary of health and environment shall provide technical support related to the activities of the solid waste grants advisory committee, including but not limited to establishing project selection criteria, performing technology evaluations, assessing technical feasibility and determining consistency with the statewide solid waste management plan, the applicable county or regional solid waste management plan and regional activities.

(e) In accordance with schedules established by the secretary of health and environment, the solid waste grants advisory committee shall meet to review competitive grant applications submitted pursuant to subsection (b) of K.S.A. 65-3415, and amendments thereto. The advisory committee shall establish a project priority list for each fiscal year based upon the availability of funds as estimated by the secretary and shall make recommendations regarding the selection of grantees and the disbursement of moneys.

History: L. 1995, ch. 221, § 4; L. 2001, ch. 126, § 8; L. 2003, ch. 130, § 21; July 1.

65-3427. Limitation on number of employees for solid waste management. The number of full-time and regular part-time positions equated to full-time, excluding seasonal and temporary positions, for the department of health and environment for any solid waste management programs and functions pursuant to K.S.A. 65-3401 through 65-3425, and amendments thereto, shall not exceed 44.

History: L. 1995, ch. 221, § 6; July 1.

65-3428. Plastic bulk merchandise container sales; definitions; requirements. (a) As used in this section:

(1) "Plastic bulk merchandise container" means a plastic crate, pallet or shell used by a product producer, distributor or retailer for the bulk transportation or storage of retail containers of milk, eggs, bakery items or bottled beverage products.

(2) "Proof of ownership" includes a bill of sale or other evidence showing that an item has been sold to the person possessing the item.

(b) A person who is in the business of recycling, shredding or destroying plastic bulk merchandise containers:

(1) Shall not pay for the purchase of any plastic bulk merchandise container with cash; and

(2) shall, for each transaction in which the person purchases one or more plastic bulk merchandise containers, make or obtain a record of the method of payment used to purchase the containers.

(c) A person who is in the business of recycling, shredding or destroying plastic bulk merchandise containers, before purchasing five or more plastic bulk merchandise containers from the same person, shall:

(1) Obtain from that person proof of ownership for the containers;

(2) make or obtain a record that contains:

(A) The name, address, telephone number and the identifying number from the seller's driver's license, military identification card, passport or personal identification card of the person or the person's authorized representative. For the purpose of this subsection, the identifying number from an official governmental document for a country other than the United States may be used to meet this requirement only if a legible fingerprint is also obtained from the seller;

(B) a copy of the identification card or document containing such identifying number;

(C) the name and address of the buyer of the containers or any consignee of the containers;

(D) a description of the containers, including the number of the containers to be sold; and

(E) the date of the transaction;

(3) verify the identity of the individual selling the containers or representing the seller from a driver's license or other government-issued identification card that includes the individual's photograph, and record the verification; and

(4) attach the record made or obtained pursuant to subsection (b)(2) to the record made or obtained pursuant to this subsection.

(d) Any person who violates the provisions of this section shall be liable for the payment of a civil penalty not to exceed $10,000 for each violation, recoverable in an individual action brought by the attorney general or county or district attorney. Each cash transaction made in violation of this section is a separate violation for purposes of imposing a penalty pursuant to this section.

(e) Any civil penalty sued for and recovered by the attorney general shall be paid into the state general fund. Any civil penalty sued for and recovered by a county or district attorney shall be paid into the general fund of the county in which the proceedings are instigated.

History: L. 2013, ch. 42, § 1; July 1.

65-3429. Same; exceptions. Nothing in this act shall be construed to apply to plastic bulk merchandise containers collected by public or private recycling or refuse haulers as part of a municipal solid waste recycling or trash collection program where the plastic bulk merchandise containers are voluntarily deposited into collection containers by a resident or commercial entity without the receipt of payment for the purposes of disposal or recycling.

History: L. 2013, ch. 42, § 2; July 1.

State of Kansas

Real Estate Appraisal Board

Permanent Administrative Regulation

Article 8.—UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE

117-8-3. "Uniform standards of professional appraisal practice"; adoption by reference. The 2018-2019 edition of the "uniform standards of professional appraisal practice," as published by the appraisal standards board of the appraisal foundation and effective January 1, 2018, is hereby adopted by reference, except for the following:

(a) All materials before page 1; and

(b) standards 7, 8, 9, and 10. (Authorized by K.S.A. 2017 Supp. 58-4105; implementing K.S.A. 2017 Supp. 58-4105 and 58-4121; effective March 25, 2016; amended Feb. 23, 2018.)

Sally Pritchett
Director

Doc. No. 046056

State of Kansas

Department of Health and Environment

Permanent Administrative Regulations

Article 16.—WATER POLLUTION CONTROL

28-16-28b. Definitions. As used in K.A.R. 28-16-28b through 28-16-28h, each of the following terms shall have the meaning specified in this regulation: (a) "Alluvial aquifer" means the sediment that is associated with and deposited by a stream and that contains water capable of being produced from a well.

(b) "Alternate low flow" means a low flow value, which is an alternate to the 7Q10 flow, that is based seasonally, hydrologically, or biologically, or a low flow determined through a water assurance district. Wherever used in this regulation in the context of mixing zones, the term shall refer to a minimum amount of streamflow occurring immediately upstream of a wastewater discharge and available, in whole or in part, for dilution and assimilation of wastewater discharges.

(c) "Antidegradation" means the regulatory actions and measures taken to prevent or minimize the lowering of water quality in surface waters of the state, including those streams, lakes, and wetlands in which existing water quality exceeds the level required for maintenance and protection of the existing uses.

(d) "Artificial sources" means sources of pollution that result from human activities and that can be abated by construction of control structures, modification of operating practices, complete restraint of activities, or any combination of these methods.

(e) "Background concentration" means the concentration of any elemental parameter listed in tables 1a, 1b, 1c, and 1d of the "Kansas surface water quality standards: tables of numeric criteria," which is adopted by reference in K.A.R. 28-16-28e, or any elemental substance meeting the definition of pollutant in this regulation, that occurs in a surface water immediately upstream of a point source or nonpoint source under consideration and is from natural sources. The list of background concentration determinations for classified waterbodies of the state is contained in table 1h of the "Kansas surface water quality standards: tables of numeric criteria."

(f) "Base flow" means that portion of a stream's flow contributed by sources of water other than precipitation runoff. Wherever used in this regulation in the context of stream classification, the term shall refer to a fair weather flow sustained primarily by springs or groundwater seepage, wastewater discharges, irrigation return flows, releases from reservoirs, or any combination of these factors.

(g) "Bioaccumulation" means the accumulation of toxic substances in plant or animal tissue through either bioconcentration or biomagnification.

(h) "Bioassessment methods and procedures" means the use of biological methods of assessing surface water quality, including field investigations of aquatic organisms and laboratory or field aquatic toxicity tests.

(i) "Bioconcentration" means the concentration and incorporation of toxic substances into body tissues from ambient sources.

(j) "Biomagnification" means the transport of toxic substances through the food chain through successive cycles of eating and being eaten and through the subsequent accumulation and concentration of these substances in higher-order consumers and predators.

(k) "Biota" means the animal and plant life and other organisms of a given geographical region.

(l) "Carcinogenic" means having the property of inducing the production of cancerous cells in organisms.

(m) "Classified surface water" means any surface water or surface water segment that supports or, in the absence of artificial sources of pollution, would support one or more of the designated uses of surface water defined in K.A.R. 28-16-28d or K.S.A. 2017 Supp. 82a-2001, and amendments thereto, and that meets the criteria for classification given in K.A.R. 28-16-28d.

(n) "Compliance schedule" means any provision in a discharge permit, license, or enforceable order issued by the department pursuant to the federal clean water act or K.S.A. 65-165 et seq., and amendments thereto, that, for the purposes of meeting water quality-based effluent limitations, technology-based limits, and effluent limitations determined by the secretary or specified in Kansas statutes and regulations, provides a specified period of time for the construction or renovation of a wastewater treatment facility and the completion of any related scientific or engineering studies, reports, plans, design specifications, or other submittals required by the department.

(o) "Condition of acute toxicity" means any concentration of a toxic substance that exceeds the applicable acute criterion for aquatic life support specified in K.A.R. 28-16-28e or, for substances not listed in K.A.R. 28-16-28e or for mixtures of toxic substances, any concentration that exceeds 0.3 acute toxic units (TU_a), where one TU_a is equal to 100 divided by the median lethal concentration (LC_{50}). The concentration at which acute toxicity exists shall be determined through laboratory toxicity tests

conducted in accordance with the EPA's "methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms."

(p) "Condition of chronic toxicity" means any concentration of a toxic substance that exceeds the applicable chronic criterion for aquatic life support specified in K.A.R. 28-16-28e or, for substances not listed in K.A.R. 28-16-28e or for mixtures of toxic substances, any concentration that exceeds 1.0 chronic toxic unit (TU_c), where one TU_c is equal to 100 divided by inhibition concentration 25 (IC_{25}). The concentration at which chronic toxicity exists shall be determined through laboratory toxicity tests conducted in accordance with the EPA's "short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms."

(q) "Criterion" means any numerical element or narrative provision that represents an enforceable water quality condition specified in K.A.R. 28-16-28b through 28-16-28h.

(r) "Critical low flow" means the minimum amount of streamflow immediately upstream of a point source discharge that will be used to calculate the quantity of pollutants that the point source discharge may be permitted to discharge without exceeding water quality criteria specified in K.A.R. 28-16-28b through 28-16-28h. The critical low flow may be the 7Q10 flow or the alternate low flow as defined in this regulation.

(s) "Department" means Kansas department of health and environment.

(t) "Designated use" means any of the uses specifically attributed to surface waters of the state in K.A.R. 28-16-28d or K.S.A. 2017 Supp. 82a-2001, and amendments thereto.

(u) "Digression" means an actual ambient concentration of a pollutant that does not meet the numeric criteria value for that pollutant.

(v) "Discharge" means the release of effluent, either directly or indirectly, into surface waters of the state.

(w) "Discharge design flow" means either of the following:

(1) The anticipated wastewater flow for the next permit cycle determined by the department for an industrial wastewater treatment facility, as defined in K.A.R. 28-16-56c; or

(2) the wastewater treatment capacity of a facility approved by the secretary for other wastewater treatment facilities or systems.

(x) "Discharger" means a person or facility that is responsible for the release of effluent into surface waters of the state.

(y) "Duration of digression" means the period of time over which pollutant concentrations can be averaged, including the time span during which aquatic life can be exposed to elevated levels of pollutants without harm.

(z) "Ecological integrity" means the natural or unimpaired structure and functioning of an aquatic or terrestrial ecosystem.

(aa) "Effluent" means the sewage or other wastewater discharged from an artificial source.

(bb) "EPA" means United States environmental protection agency.

(cc) "*Escherichia coli*" means a subset of the coliform group that is part of the normal intestinal flora in humans and animals and is a direct indicator of fecal contamination in water.

(dd) "Exceptional state waters" means any of the surface waters or surface water segments that are of remarkable quality or of significant recreational or ecological value, are listed in the surface water register as defined in this regulation, and are afforded the level of water quality protection under the antidegradation provisions of K.A.R. 28-16-28c and the mixing zone provisions of K.A.R. 28-16-28c.

(ee) "Excursion from numeric criteria value" means the digression of a pollutant exceeding its numeric criteria value beyond the designated duration of digression.

(ff) "Existing use" means any of the designated uses described in K.A.R. 28-16-28d or K.S.A. 82a-2001, and amendments thereto, known to have occurred in, or to have been made of, a surface water or surface water segment on or after November 28, 1975.

(gg) "Federal clean water act" means the federal water pollution prevention and control act, 33 U.S.C. Section 1251 et seq., as in effect on January 1, 1998.

(hh) "Frequency of digression" means the number of times that an excursion from numeric criteria value can occur over time without impairing the designated uses of the water.

(ii) "General purpose waters" means any classified surface water that is not classified as an outstanding national resource water or an exceptional state water.

(jj) "Groundwater" means water located under the surface of the land that is or can be the source of supply for wells, springs, or seeps or that is held in aquifers or the soil profile.

(kk) "Highest attainable condition" and "HAC" mean the achievable goal of a variance, according to K.A.R. 28-16-28f(d)(5), that reflects the modified designated use and criterion, designated use, or criterion that is applicable throughout the term of a variance.

(ll) "Inhibition concentration 25" and "IC_{25}" mean a point estimate of the toxicant concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, including reproduction and growth.

(mm) "Interim criterion" means a temporary criterion.

(nn) "Interim designated use" means a temporary designated use.

(oo) "Kansas antidegradation policy," dated August 6, 2001 and hereby adopted by reference, means the department's written policy used to prevent or minimize the lowering of water quality in surface waters of the state.

(pp) "Kansas implementation procedures: surface water quality standards," including appendix A, dated November 29, 2017 and hereby adopted by reference, means the department's written procedures used for carrying out specific provisions of surface water quality standards, available upon request from the department's division of environment.

(qq) "Maximum contaminant level" means any of the enforceable standards for finished drinking water quality specified in 40 C.F.R. 141.11, 141.13, and 141.61 through 141.66, dated July 1, 2012.

(rr) "Median lethal concentration" means the concentration of a toxic substance or a mixture of toxic substanc-

(continued)

es calculated to be lethal to 50 percent of the population of test organisms in an acute toxicity test.

(ss) "Microfibers per liter" and "μfibers/L" mean the number of microscopic particles with a length-to-width ratio of 3:1 or greater present in a volume of one liter.

(tt) "Microgram per liter" and "μg/L" mean the concentration of a substance at which one one-millionth of a gram (10^{-6} g) of the substance is present in a volume of one liter.

(uu) "Milligram per liter" and "mg/L" mean the concentration of a substance at which one one-thousandth of a gram (10^{-3} g) of the substance is present in a volume of one liter.

(vv) "Mixing zone" means the designated portion of a stream or lake where a discharge is incompletely mixed with the receiving surface water and where, in accordance with K.A.R. 28-16-28e, concentrations of certain pollutants may legally exceed chronic water quality criteria associated with the established designated uses that are applied in most other portions of the receiving surface water.

(ww) "Mutagenic" means having the property of directly or indirectly causing a mutation.

(xx) "Multiple-discharger variance" and "MDV" mean a term-limited variance for more than one discharger that is issued for a specified criterion or pollutant to achieve the highest attainable condition.

(yy) "Nonpoint source" means any activity that is not required to have a national pollutant discharge elimination system permit and that results in the release of pollutants to waters of the state. This release may result from precipitation runoff, aerial drift and deposition from the air, or the release of subsurface brine or other contaminated groundwaters to surface waters of the state.

(zz) "Numeric criteria value" means any of the values listed in tables 1a, 1b, 1c, 1d, 1g, 1h, 1i, 1j, and 1k of the "Kansas surface water quality standards: tables of numeric criteria."

(aaa) "Outstanding national resource water" means any of the surface waters or surface water segments of extraordinary recreational or ecological significance identified in the surface water register, as defined this regulation, and afforded the highest level of water quality protection under the antidegradation provisions and the mixing zone provisions of K.A.R. 28-16-28c.

(bbb) "pH" means the common logarithm of the reciprocal of the hydrogen ion concentration measured in moles per liter, expressed on a scale that ranges from zero to 14, with values less than seven being more acidic and values greater than seven being more alkaline.

(ccc) "Picocurie per liter" and "pCi/L" mean a volumetric unit of radioactivity equal to 2.22 nuclear transformations per minute per liter.

(ddd) "Point source" means any discernible, confined, and discrete conveyance from which pollutants are or could be discharged.

(eee) "Pollutant" means any physical, biological, or chemical conditions, substances, or combination of substances released into surface waters of the state that results in surface water pollution, as defined in this regulation.

(fff) "Pollutant minimization plan" and "PMP" mean a structured set of activities to improve processes and pollutant controls that prevent and reduce pollutant levels, including any cost-effective process for reducing pollutant levels, pollution prevention, treatment, best management practices, and other control mechanisms.

(ggg) "Potable water" means water that is suitable for drinking and cooking purposes in terms of both human health and aesthetic considerations.

(hhh) "Precipitation runoff" means the rainwater or the meltwater derived from snow, hail, sleet, or other forms of atmospheric precipitation that flows by gravity over the surface of the land and into streams, lakes, or wetlands.

(iii) "Presedimentation sludge" means a slurry or suspension of residual solid materials derived from an initial step in the production of potable water. This term shall include residual solids originating from the raw water supply used for industrial or other nonpotable water purposes, before the addition of any artificial materials not typically used in the production of potable water. The solid materials shall include sand, silt, and other easily settleable particles originating from the raw water supply.

(jjj) "Private surface water" means any freshwater reservoir or pond that is both located on and completely bordered by land under common private ownership.

(kkk) "Public swimming area" means either of the following:

(1) Any classified surface water that is posted for swimming by a federal, state, or local government that has jurisdiction over the land adjacent to that particular body of water; or

(2) any privately owned or leased body of water that is open and accessible to the public and is intended for swimming.

(lll) "Reconfiguration activities" means actions that beneficially reshape, remodel, or otherwise restructure the physical setting and characteristics of a surface water of the state.

(mmm) "Seven-day, ten-year low flow" and "7Q10 flow" mean the seven-day average low flow having a recurrence frequency of once in 10 years, as statistically determined from historical flow data. Where used in this regulation in the context of mixing zones, these terms shall refer to the minimum amount of streamflow occurring immediately upstream of a wastewater discharge and available, in whole or in part, for dilution or assimilation of wastewater discharges.

(nnn) "Site-specific criterion" means any criterion applicable to a given classified surface water segment and developed for the protection of the designated uses of that segment alone.

(ooo) "Streamflow" means the volume of water moving past a stream cross-sectional plane per unit of time.

(ppp) "Surface water pollution" and "pollution" mean any of the following:

(1) Contamination or other alteration of the physical, chemical, or biological properties of the surface waters of the state, including changes in temperature, taste, odor, turbidity, or color of the waters;

(2) discharges of gaseous, liquid, solid, radioactive, microbiological, or other substances into surface waters in a manner that could create a nuisance or render these waters harmful, detrimental, or injurious to any of the following:

(A) Public health, safety, or welfare;

(B) domestic, industrial, agricultural, recreational, or other designated uses; or

(C) livestock, domestic animals, or native or naturalized plant or animal life; or

(3) any discharge that will or is likely to exceed state effluent limitations predicated upon technology-based effluent standards or water quality-based standards.

(qqq) "Surface water register" means a list of the state's major classified surface waters, including a listing of waters recognized as outstanding national resource waters or exceptional state waters, and the surface water use designations for each classified surface water, periodically updated and published by the department pursuant to K.A.R. 28-16-28d and K.A.R. 28-16-28f. The surface water register, published as the "Kansas surface water register," is adopted by reference in K.A.R. 28-16-28g.

(rrr) "Surface water segment" means a delineated portion of a stream, lake, or wetland.

(sss) "Surface waters" means the following:

(1) Streams, including rivers, creeks, brooks, sloughs, draws, arroyos, canals, springs, seeps, and cavern streams, and any alluvial aquifers associated with these surface waters;

(2) lakes, including oxbow lakes and other natural lakes and man-made reservoirs, lakes, and ponds; and

(3) wetlands, including swamps, marshes, bogs, and similar areas that are inundated or saturated by surface water or groundwater at a frequency and a duration that are sufficient to support, and under normal circumstances that do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

(ttt) "Surface waters of the state" means all surface waters occurring within the borders of the state of Kansas or forming a part of the border between Kansas and one of the adjoining states.

(uuu) "Teratogenic" means having the property of causing abnormalities that originate from impairment of an event that is typical in embryonic or fetal development.

(vvv) "Thirty-day, ten-year low flow" and "30Q10 flow" mean the 30-day average low flow having a recurrence frequency of once in 10 years, as statistically determined from historical flow data. Where used in this regulation in the context of mixing zones, these terms shall refer to the minimum amount of streamflow occurring immediately upstream of a wastewater discharge and available, in whole or in part, for dilution or assimilation of wastewater discharges.

(www) "Toxic substance" means any substance that produces deleterious physiological effects in humans, animals, or plants.

(xxx) "Turbidity" means the cloudiness of water as measured by optical methods of nephelometry and expressed in standard nephelometric units.

(yyy) "Use attainability analysis" means a study conducted or accepted by the department that is designed to determine whether or not a surface water or surface water segment supports, or is capable of supporting in the absence of artificial sources of pollution, one or more of the designated uses defined in K.S.A. 2017 Supp. 82a-2001, and amendments thereto.

(zzz) "Variance" means a time-limited designated use and criterion that reflects the highest attainable condition as an alternative to one or more of the criteria specified in K.A.R. 28-16-28e, as implemented by the department in accordance with K.A.R. 28-16-28f.

(aaaa) "Water-effect ratio" and "WER" mean the numerical toxicity, including median lethal concentration and inhibition concentration 25, of a chemical pollutant diluted in water from a given stream, lake, or wetland divided by the numerical toxicity of the same pollutant diluted in laboratory water.

(bbbb) "Water quality certification" means the department's written finding that a proposed action that impacts water quality will comply with the terms and conditions of the Kansas surface water quality standards.

(cccc) "Whole-effluent toxicity limitation" means any restriction imposed by the department on the overall acute or chronic toxicity of an effluent discharged to a surface water.

(dddd) "Zone of initial dilution" means the region of a surface water in the immediate vicinity of a discharge where acute and chronic criteria may be exceeded. (Authorized by K.S.A. 2017 Supp. 65-171d and K.S.A. 65-171m; implementing K.S.A. 65-165, K.S.A. 2017 Supp. 65-171d, K.S.A. 65-171m, and K.S.A. 2017 Supp. 82a-2001; effective May 1, 1986; amended Aug. 29, 1994; amended July 30, 1999; amended Nov. 3, 2000; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Oct. 24, 2003; amended Jan. 28, 2005; amended March 20, 2015; amended Feb. 23, 2018.)

28-16-28d. Surface water classification and use designation. (a) Surface water classification. Surface waters shall be classified as follows:

(1) Classified stream segments shall be those stream segments defined in K.S.A. 2017 Supp. 82a-2001, and amendments thereto.

(2) Classified surface waters other than classified stream segments shall be defined as follows:

(A) Classified lakes shall be all lakes owned by federal, state, county, or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation.

(B) Classified wetlands shall be the following:

(i) All wetlands owned by federal, state, county, or municipal authorities;

(ii) all privately owned wetlands open to the general public for hunting, trapping, or other forms of secondary contact recreation; and

(iii) all wetlands classified as outstanding national resource waters or exceptional state waters, or designated as special aquatic life use waters according to subsection (d).

Wetlands created for the purpose of wastewater treatment shall not be considered classified wetlands.

(C) Classified ponds shall be all ponds owned by federal, state, county, or municipal authorities and all privately owned ponds that impound water from a classified stream segment as defined in paragraph (a)(1).

(b) Designated uses of classified surface waters other than classified stream segments. The designated uses of classified surface waters other than classified stream segments shall be defined as follows:

(continued)

Article 29.—SOLID WASTE MANAGEMENT

PART 1.—DEFINITIONS AND ADMINISTRATION PROCEDURES

28-29-1. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended May 1, 1982; revoked May 10, 1996.)

28-29-2. Variances. (a) *General Procedure.* If exceptional circumstances make strict conformity with these regulations impractical or not feasible, a person may submit a written request for a variance from these regulations. The department may grant a variance from these regulations and stipulate conditions and time limitations as necessary to comply with the intent of all applicable state and federal laws. The department shall review the variance request and notify the person within ninety (90) days of receipt that the application is approved, denied, or requires modification.

(b) *Experimental operations.* Variances may be granted to facilitate experimental operations intended to develop new methods or technology. Variances for experimental operations shall be considered only where significant health, safety, environmental hazards, or nuisances will not be created, and when a detailed proposal is submitted and accepted which sets forth the objectives, procedures, controls, monitoring, reporting, time frame, and other data regarding the experiment.

(c) *Restrictions.* Variances for experimental operations shall be limited to a maximum of two (2) years; however, the department may renew the variance for one or more additional two-year periods upon a showing by the person that the need for a variance continues to be valid. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-3. Definitions. (a) "Active area" means any solid waste disposal area that has received solid waste and has fewer than 12 inches of soil cover.

(b) "Agricultural waste" means solid waste resulting from the production of farm or agricultural products.

(c) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as is, or tends significantly to be injurious to human health or welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or property.

(d) "Aquifer" means saturated soils and geologic materials that are capable of recharging a well within 24 hours and whose boundaries can be identified and mapped from hydrogeologic data. This term shall include all hydraulically connected aquifers.

(e) "Backyard composting" means a composting operation that does not distribute the finished compost for use off-site and that meets one of the following conditions:

(1) The materials are all compostable and are generated by no more than four single residences, or the equivalent of four single residences.

(2) The material being composted consists entirely of yard waste, and the volume of material being composted is less than 10 cubic yards.

(f) "Bulky waste" means items of refuse too large to be placed in refuse storage containers, including appliances, furniture, tires, large auto parts, motor vehicles, trees, branches, and stumps.

(g) "By-product" means a material produced without separate commercial intent during the manufacture or processing of other materials or mixtures.

(h) "Commercial waste" means all solid waste emanating from establishments engaged in business, including solid waste originating in stores, markets, office buildings, restaurants, shopping centers, and theaters.

(i) "Composting" means a controlled process of microbial degradation of organic material into a stable, nuisance-free, humus-like product. This term shall not include the following:

(1) Manure storage piles, whether turned to stabilize or not turned; and

(2) yard waste directly applied to agricultural land.

(j) "Composting area" means the area used for receiving, processing, curing, and storing compostable materials and compost.

(k) "Design period" means the period consisting of the operating life of the solid waste landfill facility and the postclosure care period.

(l) "Detection monitoring system" means a network of wells established to detect any releases of contaminants from a landfill unit.

(m) "Director" means the director of the divi-

sion of environment, Kansas department of health and environment.

(n) "Discarded material" means one of the following:

(1) Material that has been abandoned or disposed of; or

(2) a by-product or residual, when it is either in treatment or in storage or when it is used in a manner that constitutes disposal.

(o) "Disease vector" means rodents, flies, mosquitos, or other pests capable of transmitting disease to humans.

(p) "Disturbed area" means those areas within a facility that has been physically altered during waste disposal operations or during the construction of any part of the facility.

(q) "Existing unit" means a municipal solid waste disposal unit that is completely constructed and receiving waste before the appropriate date specified in K.A.R. 28-29-100.

(r) "Facility" means a site and all equipment and fixtures on a site used to process or dispose of a solid waste. A facility consists of the entire solid waste processing or disposal operation. All structures used in connection with the waste processing or disposal operation, including any structures used to facilitate the processing or disposal, shall be considered a part of the facility, including the following:

(1) Solid waste disposal units;

(2) buildings;

(3) treatment systems;

(4) processing and storage operations; and

(5) monitoring stations.

(s) "Garbage" means the animal and vegetable waste resulting from the handling, processing, storage, packaging, preparation, sale, cooking, or serving of meat, produce, or other foods and shall include unclean containers.

(t) "Gas collection system" means a system of wells, trenches, pipes, and other related ancillary structures, including manholes, compressor housings, and monitoring installations, that collect and transport the gas produced in a solid waste landfill to one or more gas processing points. The flow of gas through such a system can be produced by naturally occurring gas pressure gradients or can be aided by an induced draft generated by mechanical means.

(u) "Gas venting system" means a system of wells, trenches, pipes, and other related structures that vents the gas produced in a solid waste landfill to the atmosphere.

(v) "Geomembrane" means a membrane with a very low permeability, which means approximately 1×10^{-12} cm/sec, that is used with a foundation of soil, rock, earth, or any other geotechnical, engineering-related material as an integral part of a human-made structure or system designed to limit the movement of liquid or gas in the system.

(w) "Geotextile" means any permeable textile used with soil, rock, earth, or any other geotechnical, engineering-related material as an integral part of a human-made structure or system designed to perform functions including any of the following:

(1) Provide planar flow for drainage;

(2) filter particulates from a liquid; or

(3) serve as a cushion to protect geomembranes.

(x) "Groundwater" means that part of subsurface water in the ground that is in the zone of saturation.

(y) "Incineration" means the controlled process of burning solid, liquid, and gaseous combustible wastes for volume and weight reduction in facilities designed for that use.

(z) "Incinerator" means any device or structure used for the destruction or volume reduction of solid waste by combustion pursuant to disposal or salvaging operations.

(aa) "Land surveyor" means a person who has received a license to practice land surveying from the state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.

(bb) "Leachate" means liquid that has been or is in direct contact with solid waste or the active area of a solid waste disposal unit.

(cc) "Licensed geologist" means a person who has received a license to practice geology from the Kansas state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.

(dd) "Lift" means an accumulation of waste that is compacted into a unit and over which daily cover material is normally placed.

(ee) "Long-term care" means the maintenance of all appurtenances and systems installed or used in the containment of solid wastes and the maintenance of the effective performance of leachate or gas collection, treatment, and disposal systems installed for use during the postclosure care period at a solid waste disposal area or a solid waste processing facility.

(ff) "Mixed refuse" means a mixture of solid

wastes containing both putrescible and nonputrescible materials.

(gg) "Monofill" means a landfill in which 90 percent or more of the waste disposed is restricted to one specified waste.

(1) All other waste disposed of in a monofill shall meet both of the following requirements:

(A) The waste shall be associated with the process that produced the specified waste.

(B) The waste shall have characteristics similar to those of the specified waste and shall have similar and limited potential hazards to human health and the environment.

(2) Clean rubble, as defined in K.S.A. 65-3402 and amendments thereto, may be disposed of in any monofill and shall not be considered in calculating the percentage of specified waste in the monofill.

(hh) "National pollutant discharge elimination system" and "NPDES" shall have the meaning specified in K.A.R. 28-16-58.

(ii) "New facility" and "new unit" mean a municipal solid waste landfill (MSWLF), as defined in K.S.A. 65-3402 and amendments thereto, or a unit at a facility for which either of the following conditions applies:

(1) The MSWLF or unit is a permitted or unpermitted MSWLF or unit that has not accepted any waste before October 9, 1993.

(2) The MSWLF or unit is an existing MSWLF or unit whose lateral boundaries are increased after the effective date specified in K.A.R. 28-29-100.

(jj) "Nuisance" means either of the following situations, if caused by or a result of the management of solid wastes in violation of the solid waste statutes in chapter 65, article 24, or the solid waste regulations in article 29 of these regulations:

(1) A situation that is injurious to health or offensive to the senses or that obstructs the free use of property in a manner that interferes with the comfortable enjoyment of life or property; or

(2) a situation that adversely affects the entire community or neighborhood, or any substantial number of persons, even though the extent of the annoyance or damage inflicted on individuals is unequal.

(kk) "Official plan" means a comprehensive plan submitted to and approved by the secretary as provided in K.S.A. 65-3405, and amendments thereto.

(ll) "100-year, 24-hour storm" means a precipitation event of 24-hour duration with a one percent probability of occurring in any given year.

(mm) "On-site" means on the premises where solid waste generation occurs, including two or more pieces of property that are divided only by public or private rights-of-way and that are otherwise contiguous.

(nn) "Open burning" means the burning of any materials without all of the following characteristics:

(1) Control of combustion air to maintain adequate temperature for efficient combustion;

(2) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(3) control of emission of the gaseous combustion products.

(oo) "Operating record" means a compilation of reports, plans, specifications, monitoring data, and other information concerning facility operations. The operating record shall be kept on-site or at an alternate, secure location specified in the operating plan, in accordance with these regulations.

(pp) "Operator" means the person or persons responsible for the operation and maintenance of a facility or part of a facility.

(qq) "Owner" means the person or persons who own a facility or part of a facility.

(rr) "Permit" means a written permit issued by the secretary that by its conditions may authorize the permittee to construct, install, modify, or operate a specified solid waste disposal area or solid waste processing facility.

(ss) "Permit area" and "permitted area" mean the entire approved horizontal and vertical area occupied by a permitted solid waste processing or disposal facility.

(tt) "Point of compliance" means a specified horizontal distance from the edge of a disposal unit's planned design. The point of compliance shall be the point at which an owner or operator demonstrates compliance with the liner performance standard, if applicable, and with the groundwater protection standard.

(uu) "Processing of wastes" means the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal.

(vv) "Professional engineer" means a person who has registered with and obtained a license to practice engineering from the state board of technical professions pursuant to K.S.A. 74-7001 et seq., and amendments thereto.

(ww) "Publicly owned treatment works (POTW)" means a treatment works that is owned by the United States of America, the state of Kansas, or a unit of local government. This definition shall include any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastewater. The definition shall include sewers, pipes, and other conveyances only if they convey wastewater to a POTW.

(xx) "Putrescible wastes" means solid waste that contains organic matter capable of being decomposed by microorganisms and that is capable of attracting or providing food for birds and disease vectors.

(yy) "Qualified groundwater scientist" means a licensed geologist or professional engineer who has sufficient training and experience in groundwater hydrology and related fields. Sufficient training may be demonstrated by a professional certification or by the completion of an accredited university program that enables the individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

(zz) "Resource recovery" means the recovery of material or energy from solid waste.

(aaa) "Run-off" means water resulting from precipitation that flows overland from any part of a facility, except active areas, before the water enters a defined stream channel, and any portion of the overland flow that infiltrates into the ground before the water reaches the stream channel.

(bbb) "Run-on" means any rainwater or surface water that flows onto any part of a facility.

(ccc) "Salvaging" means the controlled removal of reusable materials from solid waste.

(ddd) "Sanitary landfill" means a method of disposing of solid wastes on land without creating nuisances or hazards to the public health or safety or the environment at a permitted solid waste disposal area that meets the standards specified in K.A.R. 28-29-23.

(eee) "Scavenging" means the removal of materials from a facility or unit that is not salvaging.

(fff) "Significant modifications" means substantial alterations, changes, additions, or deletions to a facility, facility operations, facility ownership, or facility financial status that occur after permit issuance.

(ggg) "Small landfill" and "small arid landfill" mean a municipal solid waste landfill that has been granted an exemption from the design requirements in K.A.R. 28-29-104, in accordance with K.A.R. 28-29-103.

(hhh) "Source-separated organic waste" means organic material that has been separated from noncompostable material at the point of generation and shall include the following wastes:

(1) Vegetative food waste;

(2) soiled or unrecyclable paper;

(3) sewage sludge;

(4) other wastes with similar properties, as determined by the department; and

(5) yard waste in combination with these materials.

(iii) "Special waste" means any solid waste that, because of physical, chemical, or biological characteristics, requires special management standards due to concerns for owner or operator safety regarding handling, management, or disposal.

(jjj) "Static safety factor" means the ratio between resisting forces or moments in a slope and the driving forces or moments that can cause a massive slope failure.

(kkk) "Storage" means the containment of solid wastes in a manner that shall not constitute disposal or processing, under one of the following conditions:

(1) Precollection. Storage by the generator, on or adjacent to the premises, before initial collection. Under these regulations, precollection storage shall not require a processing facility permit.

(2) Postcollection. Storage by the processor or a collector, while the waste is awaiting processing or transfer to a disposal or recovery facility. Under these regulations, postcollection storage shall require a processing facility permit.

(lll) "Surface impoundment" means a natural topographic depression, a man-made excavation, or diked area into which flowing wastes, including liquid wastes and wastes containing free liquids, are placed. For the purposes of these solid waste regulations, a surface impoundment shall not be considered a landfill.

(mmm) "25-year, 24-hour storm" means a precipitation event of 24-hour duration with a four percent probability of occurring in any given year.

(nnn) "Unit" and "disposal unit" mean a discrete area at a permitted landfill that is used for the final disposal of solid waste. These terms shall include the following means of disposal:

(1) Trench;

(2) area fill; and

(3) cut and cover.

(ooo) "Uppermost aquifer" means the first aq-

uifer likely to be impacted by contamination from the facility. This term shall include the migration pathway to the aquifer and shall extend to the first demonstrated aquiclude. This term shall also include perched water tables, which are locally elevated water tables above a discontinuous low-permeability layer that is within a relatively higher-permeability layer.

(ppp) "Vegetative food waste" means food waste and food processing waste from materials including fruits, vegetables, and grains. Vegetative food waste shall not refer to animal products or by-products, including dairy products, animal fat, bones, and meat.

(qqq) "Vertical expansion" means an increase in the design capacity of an existing unit by increasing the final elevation limit of the unit.

(rrr) "Water pollution" means contamination or alteration of the physical, chemical, or biological properties of any waters of the state that creates a nuisance or that renders these waters harmful to public health, safety, or welfare; harmful to the plant, animal, or aquatic life of the state; or unsuitable for beneficial uses.

(sss) "Working face" means any part of a solid waste disposal area where waste is being disposed of.

(ttt) "Yard waste" means vegetative waste generated from ordinary yard maintenance, including grass clippings, leaves, branches less than 0.5 inches in diameter, wood chips and ground wood less than 0.5 inches in diameter, and garden wastes. (Authorized by and implementing K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended Oct. 1, 1999; amended May 30, 2003.)

28-29-4. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-5. (Authorized by K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-6. Permits and engineering plans. (a) *Application for permits.* Every person desiring to obtain a permit shall file an application for a permit for the proposed solid waste disposal area or processing facility with the department at least thirty (30) days before the date the person wishes to start construction, alteration, or operation of the disposal area or processing facility. The application shall be on forms furnished by the department.

(b) *Design plans and engineering reports.*

(1) Design and closure plans and engineering reports required under these regulations shall bear the seal and signature of a professional engineer licensed to practice in Kansas.

(2) *Waiver.* Plans, designs, and relevant data for the construction of the following solid waste disposal areas and processing facilities, need not be prepared by a professional engineer provided that a review of these plans is conducted by a professional engineer licensed to practice in Kansas:

(A) Solid waste processing facilities when the equipment is originally manufactured for those purposes and installation is supervised by the vendor, or when the equipment requires only fencing, buildings, and connection to utility lines to be operational;

(B) Construction and demolition landfills; and

(C) Solid waste disposal areas considered by the department to be located in secure geological formations, which are a part of a solid waste management system established pursuant to K.S.A. 65-3401 *et seq.*, and which are expected to receive less than one hundred (100) tons of solid waste annually.

(c) *Permit considerations.* Any permit issued by the secretary shall, where appropriate, be reviewed with respect to all responsibilities within the department.

(d) *Transfer of permits.* Before any assignment, sale, conveyance, or transfer of all or any part of the property upon which a solid waste processing facility, or solid waste disposal area is or has been located, and before any change in the responsibility of operating a processing facility or disposal area is made, the permittee shall notify the department, in writing, of the intent to transfer title or operating responsibility, at least thirty (30) days in advance of the date of transfer. The person to whom the transfer is to be made shall not operate the solid waste processing facility or disposal area until the secretary issues a permit to that person. The person to whom the transfer is to be made shall submit the following:

(1) A permit application and plans, maps, and data as required by subsection (a) of this regulation;

(2) Plans satisfactory to the department for correcting any existing permit violations; and

(3) Substantiation in writing that the applicant has copies of all approved maps, plans, and specifications relating to the solid waste processing facility or disposal area.

(e) *Conformity with official plan.* Permits shall not be issued by the secretary until the applicant has secured, from the board of county commissioners or from the mayor of an incorporated city having an official plan, certification that the proposed facility is consistent with the official plan. This approval shall not be required when the official plan does not provide for management of the solid waste(s) to be processed or disposed.

(f) *Reopening closed sites or facilities.* Any person proposing to reopen, excavate, disrupt, or remove any solid waste from any solid waste disposal area where operations have been terminated shall secure a new permit as specified in paragraph (a) of this regulation. Applications for a permit shall include, where applicable, an operational plan stating the area involved, lines and grades defining limits of excavation, estimated number of cubic yards of material to be excavated, location where excavated solid waste is to be deposited, the estimated time required for excavation, and a plan for restoring the site.

(g) *Emergency provisions.* In emergency situations involving solid waste which requires storage, transportation, or disposal on a one-time basis or other special cases where strict adherence to these regulations would result in undue hardships or unnecessary delays, the department can prescribe on a case-by-case basis, the procedures and conditions necessary for the safe and effective management of the wastes. The generator shall not take action in these cases except as immediately necessary for the protection of human health or the environment, until the action is approved by the department. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-6a. Public notice of permit actions, public comment period, and public hearings. (a) Public notice and comment period.

(1) Scope and timing. A public notice shall be given by the department when a municipal solid waste landfill permit action has been proposed under K.A.R. 28-29-6 or when a public hearing has been scheduled pursuant to subsection (b) of this regulation.

(A) Public notice shall be required for a draft permit or any proposed significant modifications to a permit by the department.

(B) Public notice shall be required for any public hearing on a permit action.

(C) A public notice shall not be required when suspension, denial or revocation, or non-significant modification of a permit is proposed by the department.

(D) A public notice may describe more than one permit action or hearing.

(E) Each public notice shall be published not less than 30 days prior to the hearing or proposed action.

(2) Procedures.

(A) Each public notice shall be published in the Kansas register.

(B) Where a proposed action or hearing may generate significant local interest, a public notice shall also be published in a newspaper having major circulation in the vicinity of the proposed action or hearing.

(3) Contents of public notice. Each public notice issued under this regulation shall contain the following information:

(A) The name and address of the office processing the permit action for which notice is being given;

(B) the name and location of the facility for which the permit action is proposed;

(C) a map of the facility for which the permit action is proposed;

(D) a brief description of the activity to be conducted at the facility for which the permit action is proposed;

(E) the name, address, and telephone number of the person from whom interested persons may obtain or review additional information;

(F) the time and place of any hearing that will be held; and

(G) a brief description of the comment procedures outlined in subsections (b) and (c) of this regulation.

(b) Public comments. During the public comment period provided in subsection (a) of this regulation, any interested person may submit written comments. All comments, except those concerning determinations by local government units that the proposed permit action conforms with the official plan, shall become a part of the permit rec-

ord and shall be considered in making a final decision on the proposed permit action.

(c) Public hearings. If the department determines there is sufficient local interest in a proposed permit action, a public hearing may be scheduled. All written and verbal comments received during a public hearing provided in subsection (a) of this regulation shall become a part of the permit record and be considered in making a final decision on the proposed permit action.

(d) Response to comments. A response to comments shall be issued at the time any final permit decision is issued. The response shall be available to the public and shall:

(1) Specify what, if any, changes were made to the proposed action as a result of public comment; and

(2) briefly respond to any significant comments received during the public comment period. (Authorized by K.S.A. 65-3406; amended by L. 1993, Ch. 274, Sec. 2; implementing K.S.A. 65-3401; effective March 21, 1994.)

28-29-7. Conditions of permits. (a) When granting a permit, the secretary shall consider and stipulate: the types of solid wastes which may be accepted or disposed, special operating conditions, procedures, and changes necessary to comply with these and other state or federal laws and regulations.

(b) When the department determines that a solid waste has or may have value as a recoverable resource, a permit may require or may be modified to require segregation of the materials, processing, separate disposal, and marking to allow future retrieval of the materials.

(c) The department may specify conditions or a date upon which each permit will expire. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-8. Modifications of permits. (a) The permittee shall notify the department in writing at least thirty (30) days before any proposed modification of operation or construction from that described in the plan of operation or permit. The permittee shall not proceed with the modification until the department provides written approval.

(b) The department may at any time modify a permit or any term or condition of a permit to include: special conditions required to comply with the requirements of these regulations; to avoid hazards to public health, or the environment or to abate a public nuisance; or to include modifications proposed by the permittee and approved by the department. Permits may be modified when:

(1) The permittee is not able to comply with the terms or conditions of the permit due to an act of God, a strike against someone other than the permittee, material shortage, or other conditions over which the permittee has little or no control; or

(2) New technology that can provide significantly better protection for health and environmental resources of the state becomes available.

(c) The permittee shall take prompt action to comply with the new special conditions, or within fifteen (15) days of receipt of notification of the new special conditions, request a hearing before the secretary in accordance with K.S.A. 65-3412. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-9. Suspension of permits. (a) A permit shall be suspended by the department when in the opinion of the secretary this action is necessary to protect the public health or welfare, or the environment. The secretary shall notify the permittee of the suspension and the effective date. At the time of giving this notice, the secretary shall identify items of noncompliance with the requirements of these regulations or with conditions of the permit and shall specify deficiencies which the permittee shall correct, actions which the permittee shall perform, and the date or dates by which the permittee shall submit a plan detailing corrective action taken or to be taken in order to achieve compliance.

(b) The suspension shall remain in effect until the deficiencies are corrected to the satisfaction of the secretary or until the secretary makes a final determination based on the outcome of a hearing requested by the permittee under the provision of K.S.A. 65-3412 or amendments of that statute. The determination may result in termination of the suspension, continuation of the suspension, or modification or revocation of the permit.

(c) Permits shall be suspended for failure to pay the permit fee required by K.S.A. 65-3407 or amendments of that statute. (Authorized by

K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-10. Denial or revocation of permits. (a) A permit may be denied or revoked for any of the following reasons:

(1) Misrepresentation or omission of a significant fact by the permittee either in the application for the permit or in information subsequently reported to the department;

(2) Improper functioning or operation of processing facility or the disposal area that causes pollution or degradation of the environment or the creation of a public health hazard or a nuisance;

(3) Violation of any provision of K.S.A. 65-3401 *et seq.* or these rules and regulations or other restrictions set forth in the permit or in a variance;

(4) Failure to comply with the official plan; or

(5) Failure to comply with an order or a modification to a permit issued by the secretary.

(b) Any person aggrieved by the denial or revocation of a permit may request a hearing under the provision of K.S.A. 65-3412 or amendments of that statute. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-11. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-12. Notification of closure, closure plans, and long-term care. (a) Notification of closure. All permittees shall notify the department in writing at least 60 days before closure.

(b) Closure plans. Persons desiring to obtain a permit shall file a site closure plan at the time a permit application is submitted. The closure plan shall delineate the finished construction of the processing facility or disposal area after closure. Closure plans for disposal areas shall also provide for long-term care when wastes are to remain at the area after closure. The plan shall be updated at the time of permit renewal or at the time notice of modification is submitted in accordance with K.A.R. 28-29-8(a), or at the time the notice of closure is submitted.

(c) If wastes are to remain at the disposal area after closure, the closure plan may be required by the department to be prepared by a professional engineer licensed to practice in Kansas. Upon completion of all the procedures provided for in the closure plan, the engineer shall certify that the disposal area was closed in accordance with the plan.

(d) Closure plan contents. The closure plan shall include the following when determined applicable by the secretary:

(1) Plans for the final contours, type and depth of cover material, landscaping, and access control;

(2) final surface water drainage patterns and runoff retention basins;

(3) plans for the construction of liners, leachate collection and treatment systems, gas migration barriers or other gas controls;

(4) cross sections of the site that delineate the disposal or storage locations of wastes. The cross sections shall depict liners, leachate collection systems, the waste cover, and other applicable details;

(5) plans for the post-closure operation and maintenance of liners, leachate and gas collection and treatment systems, cover material, runoff retention basins, landscaping, and access control;

(6) removal of all solid wastes from processing facilities;

(7) plans for monitoring and surveillance activities after closure;

(8) recording of a detailed site description, including a plot plan, with the department. The plot plan shall include the summaries of the logs or ledgers of waste in each cell, depth of fill in each cell, and existing conditions;

(9) a financial plan for utilization of the surety bond or cash bond required by K.S.A. 65-3407; and

(10) an estimate of the annual post-closure and maintenance costs.

(e) Long-term care. The owner of a solid waste disposal area, where the wastes are not removed as a part of the closure plan, shall provide long-term care for a period of at least 30 years following approval by the department of completion of the procedures specified in the closure plan. At the time of application for, or at the time of closure of, a solid waste disposal area permit, additional periods of long-term care may be specified by the secretary as the secretary deems necessary to protect public health or welfare, or the environment. (Authorized by K.S.A. 1996 Supp. 65-3406, as amended by L. 1997, Ch. 139, Sec. 1; implementing K.S.A. 1996 Supp. 65-3406, as amended

by L. 1997, Ch. 139, Sec. 1, and 65-3407, as amended by L. 1997, Ch. 140, Sec. 4; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended July 10, 1998.)

28-29-13. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-14. (Authorized by K.S.A. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-15. (Authorized by K.S.A. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-16. Inspections. (a) The secretary or any duly authorized representative of the secretary, at any reasonable hour of the day, having identified themselves and giving notice of their purpose, may:

(1) Enter a factory, plant, construction site, solid waste disposal area, solid waste processing facility, or any environment where solid wastes are generated, stored, handled, processed, or disposed, and inspect the premises and gather information of existing conditions and procedures;

(2) Obtain samples of solid waste from any person or from the property of any person, including samples from any vehicle in which solid wastes are being transported;

(3) Drill test wells on the affected property of any person holding a permit or liable for a permit under K.S.A. 65-3407 or amendments of that statute and obtain samples from the wells;

(4) Conduct tests, analyses, and evaluations of solid waste to determine whether the requirements of these regulations are otherwise applicable to, or violated by, the situation observed during the inspection;

(5) Obtain samples of any containers or labels; and

(6) Inspect and copy any records, reports, information, or test results relating to wastes generated, stored, transported, processed, or disposed.

(b) If during the inspection, unidentified or unpermitted waste storage or handling procedures are discovered, the department's representative may instruct the operator of the facility to retain and properly store solid or hazardous wastes, pertinent records, samples, and other items. These materials shall be retained by the operator until the identification and handling of the waste is approved by the department.

(c) When obtaining samples, the department's representative shall allow the facility operator to collect duplicate samples for separate analysis. Analytical data that might reveal trade secrets shall be treated as confidential by the department, when requested by the owner. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-17. (Authorized by K.S.A. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked, E-82-8, April 10, 1981; revoked May 1, 1982.)

28-29-17a. This regulation shall be revoked on and after February 24, 2000. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective, E-82-8, April 10, 1981; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked Feb. 24, 2000.)

28-29-17b. This regulation shall be revoked on and after February 24, 2000. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked Feb. 24, 2000.)

28-29-18. (Authorized by K.S.A. 1983 Supp. 65-3406; implementing K.S.A. 1983 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended, T-84-41, Dec. 21, 1983; amended May 1, 1984; revoked March 22, 2002.)

28-29-19. Monitoring required. As a condition for issuing a permit, the secretary may require the approval, installation, and operation of environmental quality monitoring systems before the acceptance of solid wastes for storage, processing, or disposal. Approval of the monitoring system(s) will be based on the following:

(a) The location of monitoring wells, air monitoring stations, and other required sampling points;

(b) Plans and specifications for the construction of the monitoring systems;

(c) Frequency of sampling; and

(d) Analyses to be performed. (Authorized by K.S.A. 1981 Supp. 65-3406; implementing K.S.A. 1981 Supp. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-20. Restrictive covenants and easements. (a) Permitted soild waste disposal areas. Each owner of a solid waste disposal area that is required to have a permit and where wastes will remain at the solid waste disposal area after closure may be required by the secretary to execute a restrictive covenant or easement, or both. The restrictive covenant with the register of deeds' stamp or the easement, or both, shall be submitted to the department before the permit is issued.

(b) Solid waste disposal areas without a permit. Each owner of a solid waste disposal area approved by the secretary under K.S.A. 65-3407c, and amendments thereto, may be required by the secretary to execute a restricitive covenant.

(c) Restrictive covenant. If required, the owner shall execute and file with the county register of deeds a restrictive covenant to run with the land that fulfills the following requirements:

(1) Covers all areas that have been or will be used for waste disposal;

(2) specifies the location of the solid waste disposal area. Acceptable methods to determine the location shall include the following:

(A) Obtaining a legal description by measuring from the property boundaries;

(B) obtaining a legal description by measuring from a permanent survey marker or benchmark; and

(C) obtaining the latitude and longitude, accurate to within five meters, using a global positioning system;

(3) specifies the uses that may be made of the solid waste disposal area after closure;

(4) requires that use of the property after closure be conducted in a manner that preserves the integrity of waste containment systems designed, installed, and used during operation of the solid waste disposal areas, or installed or used during the postclosure maintenance period;

(5) requires the owner or tenant to preserve and protect all permanent survey markers and benchmarks installed at the solid waste disposal area;

(6) requires the owner or tenant to preserve and protect all environmental monitoring stations installed at the solid waste disposal area;

(7) requires subsequent property owners or tenants to consult with the department during planning of any improvement to the site and to receive approval from the department before commencing any of the following:

(A) Excavation or construction of permanent structures;

(B) construction of drainage ditches;

(C) alteration of contours;

(D) removal of waste materials stored on the site;

(E) changes in vegetation grown on areas used for waste disposal;

(F) production, use, or sale of food chain crops grown on land used for waste disposal; or

(G) removal of security fencing, signs, or other devices installed or used to restrict public access to waste storage or solid waste disposal areas; and

(8) provides terms whereby modifications to the restrictive covenant or other land uses may be initiated or proposed by property owners.

(d) Easement. If required, the owner shall execute an easement allowing the secretary, or the secretary's designee, to enter the premises to perform any of the following:

(1) Complete items of work specified in the site closure plan;

(2) perform any item of work necessary to maintain or monitor the area during the postclosure period; or

(3) sample, repair, or reconstruct environmental monitoring stations constructed as part of the site operating or postclosure requirements.

(e) Conveyance of easement, title, or other interest to real estate. Each offer or contract for the conveyance of easement, title, or other interest to real estate used for the long-term storage or disposal of solid waste shall contain a complete disclosure of all terms, conditions, and provisions for long-term care and subsequent land uses that are imposed by these solid waste regulations or the solid waste disposal area permit. The conveyance of title, easement, or other interest in the property shall not be consummated without adequate and complete provisions for the continued maintenance of waste containment and monitoring systems.

(f) Permanence. All covenants, easements, and other documents related to this regulation shall

be permanent, unless extinguished by agreement between the property owner and the secretary.

(g) Fees. All document-recording fees shall be paid by the property owner.

(h) Federal government applicants and owners.

(1) For federal government applicants and owners, the term "restrictive covenant" shall be replaced with "notice of restrictions" throughout this regulation.

(2) The restrictions shall be recorded in the base master plans or similar documents.

(3) If property that is owned by the federal government and that has a notice of restrictions filed according to this regulation is transferred to an entity other than the federal government, at the time of transfer the owner shall file a restrictive covenant that meets the requirements of this regulation. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3406, 65-3407; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982; amended May 30, 2003.)

28-29-20a. Laboratory certification. All monitoring analyses required under K.A.R. 28-29-19, and amendments to it, shall be conducted by a laboratory certified or approved by the department to perform these analyses. Laboratories desiring to be certified to perform these analyses shall comply with all conditions, procedures, standards, and fee requirements specified in K.A.R. 28-15-35 and 28-15-37, and amendments to them. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-82-8, April 10, 1981; effective May 1, 1982.)

PART 2.—STANDARDS FOR MANAGEMENT OF SOLID WASTES/COMPOSTING

28-29-21. Storage of solid wastes. (a) *General.* The owner or occupant or both of any premise, business establishment, or industrial plant shall provide sanitary storage for all solid waste not classified as hazardous wastes produced on his or her property which meets standards set forth in these regulations and the official plan for the area. All solid waste shall be stored so that it: does not attract disease vectors; does not provide shelter or a breeding place for disease vectors; does not create a health or safety hazard; is not unsightly; and the production of offensive odors is minimized. Each premise shall be provided with a sufficient number of acceptable containers to accommodate all solid waste materials other than bulky wastes that accumulate on the premises between scheduled removals of these materials. On premises where the quantity of solid wastes generated is sufficient to make the use of individual storage containers impractical, bulk containers may be used for storage of refuse. The bulk container may be equipped with compaction equipment and shall be a size, design, and capacity compatible with the collection equipment. Containers shall be constructed of durable metal or plastic material, be easily cleaned, and be equipped with tight-fitting lids or doors that can be easily closed and opened.

(b) *Specific storage standards.*

(1) Garbage and putrescible wastes shall be stored in:

(A) Rigid containers that are durable, rust resistant, nonabsorbent, water tight, and rodent proof. The container shall be easily cleaned, fixed with close-fitting lids, fly-tight covers, and provided with suitable handles or bails to facilitate handling;

(B) Rigid containers equipped with disposable liners made of reinforced kraft paper or polyethylene or other similar material designed for storage of garbage;

(C) Nonrigid disposable bags designed for storage of garbage. The bag shall be provided with a wallhung or free standing holder which supports and seals the bag; prevents insects, rodents, and animals from access to the contents; and prevents rain and snow from falling into the bag; or

(D) Other types of containers meeting the requirements of 16 Code of Federal Regulations Chapter II Subchapter B, part 1301 in effect June 13, 1977, and paragraph (a) of this regulation and that are acceptable to the collection agency.

(2) Mixed refuse. When putrescible wastes and nonputrescible refuse are stored together, the container shall meet the standards and requirements of paragraph (b)(1) of this regulation.

(3) Nonputrescible bulky wastes. The wastes shall be stored temporarily in any manner that does not create a health hazard, fire hazard, rodent harborage, or permit any unsightly conditions to develop, and is in accordance with any locally adopted regulations. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-22. Standards for collection and transportation of solid wastes. (a) Frequency of collection. Solid waste, excluding bulky wastes, shall be removed from the storage containers on residential premises and places of public gathering in accordance with these regulations at least once each week. Garbage and putrescible materials shall be removed from commercial or industrial properties as often as necessary to prevent nuisance conditions but at least once a week. Trash and other combustible materials, free of putrescible material, shall be removed from commercial and industrial properties as often as is necessary to prevent overfilling of the storage facilities or the creation of fire hazards. Bulky wastes, free of putrescible wastes, shall be removed from properties as often as necessary to prevent nuisance conditions from occurring.

(b) Collection equipment. All vehicles and equipment used for collection and transportation of solid waste shall be designed, constructed, maintained, and operated in a manner that will prevent the escape of any solid, semi-liquid, or liquid wastes from the vehicle or container. Collection vehicles shall be maintained and serviced periodically, and should receive periodic safety checks. Safety defects in a vehicle shall be repaired before the vehicle is used.

(c) Solid waste shall not be stored after collection in a collection vehicle for more than 12 hours unless the vehicle is parked in an area in which the land use is predominately industrial or light industrial. Solid wastes shall not be stored overnight in a collection vehicle parked in an area in which the land use is predominantly residential.

(d) Solid wastes shall not be unloaded from any collection vehicle unless the collection vehicle is a satellite vehicle unloading into a larger vehicle or the unloading point is a permitted processing facility, transfer station or disposal area, except the unloading may be done to facilitate repairs, to extinguish a fire, or for other emergency. When a vehicle is unloaded due to a emergency situation solid waste shall be reloaded and removed promptly, after the emergency no longer exists.

(e) The person operating the collection system shall provide for prompt cleanup of all spillages caused by the collection operation.

(f) The person operating the collection system shall provide for prompt collection of any waste materials lost from the collection vehicles along the route to a disposal area or processing facility. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-23. Standards for solid waste processing facilities and disposal areas. All solid waste disposal areas and solid waste processing facilities shall be located, designed, operated and maintained in conformity with the following standards: (a) *Acceptable methods of disposal.* Nonhazardous solid wastes, industrial solid wastes, and residues from solid waste processing facilities shall be disposed of in a sanitary landfill. Nonputrescible rubble and demolition waste material such as brick, mortar, broken concrete, and similar materials produced in connection with the construction or demolition of buildings or other structures, may be disposed of at a construction and demolition landfill.

(b) *Acceptable methods for processing.* Combustible solid wastes may be burned in incinerators that conform with the provisions of the air quality control act, K.S.A. 65-3001 *et seq.* and the regulations adopted under those statutes. Solid wastes may be shredded, separated, and consolidated at shredding, separation, and transfer stations for which a permit has been issued by the secretary. Animal manures, sludges, and solid wastes with high organic content may be processed into compost at an approved composting plant for which a permit has been issued by the secretary.

(c) *Planning and design.* Planning, design, and operation of any solid waste processing facility or disposal area, including, but not limited to, sanitary landfills, incinerators, compost plants, transfer stations, and other solid waste disposal areas or processing facilities, shall conform with appropriate design and operation standards of the department.

(d) *Location.* Location of all solid waste disposal areas and solid waste processing facilities shall conform to applicable state laws, and county or city zoning regulations and ordinances. All locations for solid waste disposal areas and processing facilities shall be reviewed and approved by the department before any site development is started. Solid waste disposal areas or processing facilities shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species or cause or contribute to the taking of any endangered or threatened

species as defined by K.S.A. 35-501 *et seq.* and K.A.R. 23-17-2. Sites disposing of putrescible wastes shall not be located in areas where the attraction of birds can cause a significant bird hazard to low flying aircraft. A minimum separation of twenty-five (25) feet shall be maintained between a disposal operation and any pipeline, underground utility, or electrical transmission line easement. Sanitary landfills shall not be located within the one hundred (100) year frequency floodplain unless protected by flood control levees and other appurtenances designed to prevent washout of solid waste from the site.

(e) *Access roads.* Access roads to the disposal area or processing facility shall be of all-weather construction and negotiable at all times by trucks and other vehicles. Load limits on bridges and access roads shall be sufficient to support all traffic loads which will be generated by use of the area or facility.

(f) *Reports required.* Operators of all solid waste disposal areas and processing facilities shall maintain suitable records of volumes or tonnage of solid wastes received, land area used, population served, area served, and any other information required by the conditions of the permit. All information shall be summarized and reported to the department on forms furnished by the department.

(g) *Air quality.* The operator of every solid waste disposal area or solid waste processing facility shall conform to all applicable provisions of K.S.A. 65-3001 *et seq.*, any regulations adopted under those statutes, and any local regulations pertaining to air quality.

(h) *Communication.* Two-way communications shall be available to all solid waste processing facilities or disposal areas.

(i) *Fire protection.* Arrangements shall be made for fire protection services when a fire protection district or other public fire protection service is available. When this service is not available, practical alternate arrangements shall be provided at all sites. In case of accidental fires at the site, the operator shall be responsible for initiating and continuing appropriate fire fighting methods until all smoldering, smoking, and burning ceases. All disruption of finished grades, or covered or completed surfaces, shall be covered and regraded upon completion of fire fighting activities.

(j) *Limited access.* Access to a solid waste disposal area or processing facility shall be limited to hours when an attendant or operating personnel are at the site. A gate or barrier and fencing approved by the department shall be erected to prevent access to the solid waste disposal area or processing facility during hours when the area or facility is closed. Access by unauthorized vehicles or pedestrians shall be prohibited.

(k) *Hours of operation.* Hours of operation and other limitations shall be prominently posted at the entrance of the disposal area or facility.

(l) *Salvage.* Salvage or reclamation of materials shall be permitted only when facilities specifically designed for salvaging or processing solid wastes are provided, and when the salvage materials are controlled to prevent interference with prompt, sanitary disposal of solid wastes. All salvage operations shall be conducted in a manner that will not create a nuisance.

(m) *Safety.* An operational safety program approved by the department shall be provided for employees at solid waste processing facilities and disposal areas.

(n) *Disease vector control.* Solid waste processing facilities and disposal areas shall be operated in a manner which will prevent the harborage or breeding of insects or rodents. Whenever supplemental disease vector control measures are necessary, these measures shall be promptly carried out.

(o) *Aesthetics.* Odors and particulates, including dust and litter, shall be controlled by daily application of cover material, sight screening or other means to prevent damage or nuisance. Construction and demolition landfills or other solid waste disposal areas receiving only nonputrescible waste materials may apply cover material at a less frequent rate if approved by the department.

(p) *Gas control.* The concentration of explosive gasses generated by the decomposition of solid waste disposed of on the site shall not exceed 25 percent of the lower explosive limit in on site structures (excluding gas control or recovery system components) or at facility property line. As used in this section "lower explosive limit" means the lowest percent by volume of a mixture of methane which will propogate a flame in air at 25° C and atmospheric pressure. Toxic or asphyxiating gases in concentrations harmful to humans, animals, or plant life shall not be allowed to migrate off site or accumulate in facility structures.

(q) *Water pollution.* Solid waste processing facilities and disposal areas, which include a point source of discharge of pollutants or solid wastes to off-site surface waters, shall comply with the

terms of a permit issued under K.S.A. 65-164 *et seq.* Facilities shall be designed to prevent nonpoint source pollution discharges violating applicable legal requirements implementing the Kansas statewide water quality management plan in effect on November 1, 1981 approved under section 208 of Public Law 92-500 (the Clean Water Act) as amended. Solid waste disposal areas and processing facilities shall be designed and operated so as to prevent a discharge of dredge or fill material that is in violation of section 404 of PL 92-500 (the clean water act), as in effect on November 1, 1981. Solid waste shall not be placed in unconfined waters which are subject to free movement on the surface, in the ground or within a larger body of water. If ground water which passes beneath a disposal facility is currently used as a public drinking water supply or is designated by the state of Kansas for future use as a drinking water supply, the naturally occurring ground water quality beyond the disposal site property boundary shall not be degraded. If ground water which passes beneath a disposal area or processing facility is currently used or designated by the state for purposes other than as a drinking water supply, the ground water beyond the disposal area property boundary shall be maintained at a quality as specified in the disposal area permit.

(r) *Maps required.* The operator shall maintain a log of commercial or industrial solid wastes received including sludges, liquids, or barreled wastes. The log shall indicate the source and quantity of waste and the disposal location. The areas used for disposal of these wastes and other large quantities of bulk wastes shall be clearly shown on a map and referenced to the boundaries of the tract or other permanent markings.

(s) *Disposal of sewage and industrial liquids or sludges.* Sewage or industrial solid waste liquids or sludges shall not be disposed in a sanitary landfill designed for the disposal of mixed refuse until the department has been notified and specific arrangements for handling the wastes have been approved by the department.

(t) *Disposal of hazardous waste.* Hazardous waste shall not be disposed of in a sanitary landfill. For the purposes of this subsection, "hazardous waste" means any waste determined by the secretary, under section 1 of chapter 251 of the 1981 session laws of Kansas, to be a hazardous waste and listed by the secretary as a hazardous waste in K.A.R. 28-31-3.

(u) The provisions of 40 Code of Federal Regulations Part 257.3-5 (application to land used for food chain crops), as in effect on September 23, 1981, and part 257.3-6 (disease), as in effect on September 23, 1981, are incorporated by reference. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-23a. Standards for solid waste transfer stations. (a) Applicability. Each solid waste transfer station shall be subject to the requirements of this regulation.

(b) Design requirements.

(1) Each solid waste transfer station processing, tipping, sorting, storage and compaction area shall be subject to the following design requirements, unless an alternate design is approved by the director.

(A) Each processing, tipping, sorting, storage and compaction area shall be located in an enclosed building or covered area.

(B) Each unloading area shall be of adequate size and design to allow for:

(i) efficient unloading from collection vehicles; and

(ii) unobstructed movement of vehicles.

(C) Each unloading and loading area shall be constructed of concrete or asphalt paving material.

(D) Each solid waste transfer station shall have sufficient capacity to store two days worth of solid waste in the event of an interruption in transportation or disposal service. The capacity of any trailer parked within the boundaries of the permitted site may be included as a part of the two day capacity.

(E) Each solid waste transfer station shall be large enough to segregate special wastes, including medical waste and asbestos, if special wastes will be managed at the transfer station.

(2) Each solid waste transfer station structure shall be subject to the following design requirements, unless an alternate design is approved by the director.

(A) Each enclosed structure shall be equipped with an exhaust system capable of removing accumulations of noxious or flammable gases.

(B) Each structure shall be constructed of materials that will not absorb odors or liquids from the waste.

(C) Each structure shall have a main doorway

and roof of sufficient height to allow trucks that will routinely utilize the transfer station to unload.

(3) Each solid waste transfer station access road shall be subject to the following requirements.

(A) Each access road shall be designed to accommodate expected traffic flow in a safe and efficient manner.

(B) Each access road shall be constructed with a road base that is capable of withstanding expected loads.

(C) Each on-site road shall be passable by loaded collection and transfer vehicles in all weather conditions.

(4) Each solid waste transfer station shall be subject to the following general requirements.

(A) The design of each transfer station shall minimize wind-blown litter.

(B) Control of stormwater shall be provided.

(C) Weighing or measuring capabilities shall be provided for all solid waste processed at the facility.

(D) Each owner or operator of a solid waste transfer station shall evaluate the feasibility of constructing an area at the transfer station site so that the following activities could be conducted:

(i) storage of white goods;

(ii) separation of materials for recycling;

(iii) separation of materials for composting; or

(iv) other solid waste management activities.

(E) Water shall be provided in sufficient quantity and pressure to wash down the unloading, loading, and storage areas of the transfer station.

(F) Collection of washdown water and stormwater contacting solid waste shall be provided.

(G) The following amenities shall be provided for transfer station workers:

(i) sanitary facilities;

(ii) drinking water; and

(iii) handwashing water.

(c) Operating requirements. Each solid waste transfer station owner or operator shall comply with the following operating requirements.

(1) Wastes accepted at the solid waste transfer station shall consist of residential waste and commercial waste.

(2) The following wastes shall not be accepted at any solid waste transfer station unless handling plans have been specifically approved by the department:

(A) medical waste;

(B) asbestos waste; or

(C) other special wastes.

(3) Any solid waste passing through a solid waste transfer station shall be ultimately treated or disposed of at:

(A) a solid waste management facility authorized by the department if the facility is located in Kansas; or

(B) a solid waste management facility authorized by the appropriate governmental agency if the facility is located in another state.

(4) Each access point to a solid waste transfer station shall have a sign posted that states:

(A) the hours of operation of the transfer station;

(B) the types of solid waste that shall be accepted at the transfer station;

(C) the types of wastes that shall not be accepted at the transfer station;

(D) the name, address and telephone number of the transfer station owner and operator; and

(E) the telephone number of an emergency contact person available during non-operating hours.

(5) Each time the solid waste transfer station is open, an attendant shall be on duty.

(6) Provisions shall be made to prevent vehicles from backing into the receiving pits while unloading.

(7) Access to the facility by unauthorized persons shall be limited each time the station is closed.

(8) Procedures for preventing unauthorized receipt of regulated hazardous wastes as defined pursuant to K.A.R. 28-31-3 and K.A.R. 28-29-4, polychlorinated biphenyl (PCB) wastes as defined in 40 CFR part 761 as in effect July 1, 1992, or other wastes not addressed in the transfer station operating plan shall be developed and implemented.

(9) Blowing litter at the solid waste transfer station shall be controlled.

(10) Vectors at the solid waste transfer station shall be controlled.

(11) Each solid waste transfer station shall be cleaned as necessary to:

(A) minimize odors;

(B) minimize vectors; and

(C) provide a safe working environment.

(12) All drainage from wet cleaning of any solid waste transfer station shall be:

(A) discharged to a sanitary sewer; or

(B) managed by another method approved by the director.

(13) Each day that waste is received at any solid

waste transfer station, the transfer station shall be cleaned by an appropriate method to minimize odors and nuisance conditions.

(14) All on-site roads at a solid waste transfer station site shall be maintained to minimize dust.

(15) Any solid waste received at a solid waste transfer station shall be loaded into a transfer vehicle by the next day of operation at the transfer station.

(16) Each transfer vehicle shall be removed from the transfer station site within 48 hours after being filled to capacity. Each transfer vehicle not filled to capacity in any seven day period shall be removed from the transfer station site before the end of the seven day period, unless weather, or other abnormal conditions prevent transportation of the transfer vehicle.

(17) Each solid waste transfer station shall be equipped with fire protection equipment that is:

(A) available at all times; and

(B) capable of extinguishing fire resulting from:

(i) hot ashes;

(ii) oxidizers; or

(iii) other fire sources.

(18) An on-site operating record shall be maintained by the transfer station owner or operator. Each record shall be maintained for a minimum of three years. The operating record shall contain the following information:

(A) a daily log of the quantity of solid waste received;

(B) a daily log of the quantity of solid waste transported;

(C) a daily log of the destination of the solid waste transported;

(D) a daily log of any special waste received;

(E) a daily log of any special waste transported;

(F) a copy of each special waste disposal authorization written to the transfer station owner or operator;

(G) a copy of transfer station employee training records; and

(H) a copy of the current facility permit, including the following:

(i) all facility design plans; and

(ii) the facility operating plan.

(19) Each owner or operator shall prepare and submit an annual report to the department by March 1 of each year. The report shall contain:

(A) the weight or volume of solid waste received;

(B) the destination of the solid waste transferred;

(C) the weight or volume of each type of material recovered at the transfer station; and

(D) any changes in the operation that have occurred in the previous year.

(20) Each owner or operator shall develop a contingency plan for the solid waste transfer station. The contingency plan shall:

(A) specify any procedures that shall be initiated if the solid waste transfer station experiences:

(i) an equipment breakdown;

(ii) a fire;

(iii) a receipt of hazardous material;

(iv) a release of a regulated quantity of any waste; or

(v) any other incident that may cause an emergency or suspend operations at the transfer station; and

(B) be available at any time at the transfer station.

(21) Employee training.

(A) The owner or operator of each solid waste transfer station shall provide training to each transfer station employee on the contents of the contingency plan identified in paragraph (c)(20) of this regulation, and the facility operating plan.

(B) A record of employee training required in paragraph (c)(21)(A) of this regulation shall be maintained in the operating record identified in paragraph (c)(18) of this regulation. (Authorized by K.S.A. 1993 Supp.; 65-3406; implementing K.S.A. 65-3401; effective Feb. 20, 1995.)

28-29-24. Construction and demolition landfills. (a) A permit to construct or operate a construction and demolition landfill shall not be required for a construction and demolition landfill operated on the same tract as, and in conjunction with, a permitted sanitary landfill.

(b) If a city or a county, by ordinance or resolution, has established standards equivalent to, or more stringent than, those of the department to control construction and demolition landfills, and demonstrates that it has an enforcing agency to ensure those standards are adhered to, the department will issue a permit to the person operating the site upon certification by the enforcement division of the city or county to the department that those standards will be followed. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978;

effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-25. Standards for solid waste processing facilities. (a) Incinerators. All incinerators used for combustion of solid wastes shall be designed and operated in conformity with K.S.A. 65-3001 *et seq.* and rules and regulations adopted under those statutes. All emission control devices, disposal of incinerator residues, and treatment of wastewater shall be approved by the department.

(b) Other methods of solid waste handling, processing, and disposal. Before any disposal area or processing facility, or any method of solid waste handling, processing, or disposal, not provided for in these regulations, is practiced or placed into operation, complete plans, specifications, design data, land-use plans, and proposed operation procedures shall be submitted to the department for review and permit issuance in accordance with K.A.R. 28-29-6. (Authorized by and implementing K.S.A. 1981 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; amended, E-82-8, April 10, 1981; amended May 1, 1982.)

28-29-25a. Small yard waste composting sites. This regulation shall apply to each yard waste composting site that has a composting area of one-half acre or less, but this regulation shall not apply to backyard composting. Hay, straw, and manure may be added to yard waste only for the purpose of adjusting the carbon-to-nitrogen ratio of the compost mix. The additives shall not exceed 10 percent by volume of the total mixture without the written approval of the department. Other materials may be added to the yard waste only with the written approval of the department.

(a) Site design. The owner or operator of each yard waste composting site shall design and construct the composting site to meet all of the following requirements.

(1) Composting surface and drainage.

(A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.

(B) The operation shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.

(2) Site access.

(A) At each site that composts yard waste that is brought in from off-site, the following information shall be posted on one or more signs:

(i) Site name;

(ii) site hours;

(iii) a list of the materials appropriate for composting; and

(iv) the name and telephone number of an emergency contact person.

(B) Unauthorized dumping shall be discouraged by access control.

(b) Site operations. The owner or operator of each yard waste composting site shall perform the following:

(1) Minimize odors;

(2) control disease vectors, dust, litter, and noise; and

(3) remove all finished compost within 18 months of the completion of the composting process.

(c) Site closure. The owner or operator of each yard waste composting site shall perform the following:

(1) Notify the department, in writing, at least 60 days before closure; and

(2) remove all materials from the site within six months of the last receipt of compostable material.

(d) Registration. Each owner or operator of a small yard waste composting site shall submit registration information to the department on a form provided by the department, unless the composting operation is located at a confined feeding facility that has a valid permit issued by the department. (Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective Oct. 1, 1999.)

28-29-25b. Yard waste composting facilities. This regulation shall apply to each facility that composts yard waste and has a composting area larger than one-half acre. Hay, straw, and manure may be added to yard waste only for the purpose of adjusting the carbon-to-nitrogen ratio of the compost mix. The additives shall not exceed 10 percent by volume of the total mixture without the written approval of the department. Other materials may be added to the yard waste only with the written approval of the department.

(a) Facility design. The owner or operator of each yard waste composting facility shall design and construct the facility to meet the following requirements.

(1) Composting surface and drainage.

(A) Storm water run-on shall be prevented

amendments thereto, has been added or eliminated.

(C) Non-permitted recycling services have been added or eliminated.

(3) One or more counties have been added to the plan.

(4) One or more counties have withdrawn from the plan.

(5) A change to the implementation schedule or financing methods specified in the SWM plan has occurred or will occur.

(6) Revisions are required as part of the five-year review to extend the planning horizon to 10 years.

(b) If the approved SWM plan does not meet the requirements of the solid waste management statutes or regulations, or both, a revision of the approved SWM plan may be required by the secretary. If a revision is required, written notice shall be provided by the secretary to each county commission, or the governing body of the designated city, covered by the SWM plan.

(c) Each revised SWM plan shall be reviewed by the official land-use planning agency and each official comprehensive planning agency within the area covered by the SWM plan.

(d) Each revised SWM plan shall be adopted according to the procedures specified in K.A.R. 28-29-78(b) and (d), except for regional SWM plans revised at unscheduled intervals, which shall be adopted in accordance with K.S.A. 65-3405 and amendments thereto. Adoption of the revised SWM plan by the county commission or commissions shall be conducted in an open meeting and shall provide an opportunity for public input.

(e) The county commission, the governing body of the designated city, or the SWM committee shall submit the revised SWM plan to the secretary for consideration for approval in accordance with K.A.R. 28-29-79.

(f) The county commission, or the governing body of the designated city, shall ensure that approved revisions of the SWM plan are incorporated in public copies of the plan maintained in accordance with K.A.R. 28-29-77. (Authorized by K.S.A. 65-3406; implementing K.S.A. 65-3405; effective Jan. 1, 1972; amended, E-79-22, Sept. 1, 1978; amended May 1, 1979; amended March 5, 2004.)

28-29-83. (Authorized by K.S.A. 1978 Supp. 65-3406; effective, E-79-22, Sept. 1, 1978; effective May 1, 1979; revoked May 10, 1996.)

PART 6.—FINANCIAL REQUIREMENTS

28-29-84. Permit renewal; solid waste permit fees. (a) General provisions. Each permit issued by the department for any solid waste disposal facility or area, processing facility, incinerator, transfer station, composting plant or area and reclamation facility may be renewed on or before the anniversary date of the permit each year in the following manner.

(1) Each solid waste facility operating in Kansas pursuant to a valid existing permit shall submit to the department, on or before the anniversary date of the permit, a report of the permitted activities on forms provided by the department.

(2) The annual permit renewal fee shall accompany the report. Action to approve the renewals of the permit shall not begin until such time as a properly completed report and the appropriate annual permit renewal fee are received by the department.

(b) Failure to submit. Failure to submit a complete annual report and the annual permit renewal fee on or before the anniversary date of the permit each year may subject the permit holder to denial, revocation, or suspension of the permit.

(c) Fee schedule. The fee for a permit to operate a solid waste disposal area or facility shall be as follows.

(1) The fee for an application for a proposed facility for which no permit has previously been issued by the department, or for reapplication due to loss of the permit resulting from departmental action, including revocation, denial or suspension shall be:

Incinerator	$5,000.00
Industrial solid waste disposal area	$3,000.00
Municipal solid waste disposal area	$5,000.00
Processing facility	$2,000.00
Reclamation facility	$2,000.00
Solid waste compost facility	$ 250.00
Transfer station	$1,000.00

(2) Each facility or disposal area operating pursuant to a valid, current permit issued by the department shall be required to pay an annual permit renewal fee. The annual permit renewal fees shall be:

Incinerator	$1,000.00
Industrial solid waste disposal area	$1,000.00
Municipal solid waste disposal area	$2,000.00
Processing facility	$1,000.00
Reclamation facility	$1,000.00
Solid waste compost facility	$ 250.00
Transfer station	$ 500.00

(d) Construction and demolition landfills.

(1) The fee for an application for a proposed construction and demolition disposal facility for which no permit has previously been issued by the department or as otherwise set forth in these regulations shall be as follows:

(A) each facility whose permit application projects receipt of less than 1,000 tons annually: $250.00;

(B) each facility whose permit application projects receipt of more than 1,000 and less than 10,000 tons annually: $500.00; and

(C) each facility whose permit application projects receipt of more than 10,000 tons annually: $1,000.00.

(2) Each facility operating pursuant to a valid, current permit issued by the department shall be required to pay an annual permit renewal fee. The annual permit renewal fee shall be as follows:

(A) for each facility receiving less than 1,000 tons annually: $125.00;

(B) for each facility receiving more than 1,000 and less than 10,000 tons annually: $250.00; and

(C) for each facility receiving more than 10,000 tons annually: $500.00.

(3) Fees for each facility reapplying for a permit due to loss of the permit resulting from departmental action, including revocation, denial or suspension shall be determined in accordance with paragraph (d)(1) of this regulation based on the tonnage received the 12 months prior to the revocation, denial or suspension of the permit.

(4) To determine the annual fee due, the construction and demolition disposal facility may determine the volume of waste received during the previous year and convert this volume to an equivalent weight basis using the following conversion factor: 1 cubic yard = 1,250 pounds.

(e) Multiple activities. Any person conducting more than one of the activities listed in K.A.R. 28-29-84(c)(1) at one location shall pay a single fee. This fee shall be in the amount specified for the activity having the highest fee of those conducted. (Authorized by K.S.A. 1993 Supp. 65-3406, as amended by L. 1994, Ch. 283, sec. 2; implementing K.S.A. 1993 Supp. 65-3407, as amended by L. 1994, Ch. 283, sec. 3; effective, T-28-3-15-93, March 15, 1993; effective May 17, 1993; amended Aug. 28, 1995.)

28-29-85. State solid waste tonnage fees. (a) General provisions. The operator of each solid waste disposal area in Kansas shall pay to the department a tonnage fee for each ton or equivalent volume of solid waste received and disposed of at the facility during the preceding reporting period. The fee shall be paid each reporting period until the facility no longer receives waste and begins departmentally approved closure activities. Municipal solid waste disposal areas receiving 50,000 tons or more of solid waste annually shall file the reports required by subsection (b) of this regulation and pay their tonnage fee monthly, on or before the last day of the following month. Municipal solid waste disposal areas receiving less than 50,000 tons of solid waste annually, and all other solid waste disposal areas shall file reports and pay their tonnage fee quarterly, on or before the last day of April, July, October and January.

(b) Certification and late fees. The operator of each solid waste disposal area shall certify, on a form provided by the department, the amount, source and type of solid waste received, processed, recycled, and disposed of during the preceding reporting period. Any operator failing to remit the appropriate tonnage fee and submit the report within 45 days after each reporting period shall pay a late processing fee of one and one-half percent per month on the unpaid balance from the date the fee was due until paid.

(c) Determination of waste tonnages.

(1) Operator estimates. The operator of each municipal solid waste disposal area that receives 50,000 tons or more of solid waste annually shall use actual weight records. The operator of each municipal solid waste disposal area that receives less than 50,000 tons of solid waste annually shall, subject to department approval, use one of the following methods for determining the number of tons of waste disposed of at the solid waste disposal area.

(A) The operator may use actual weight records.

(B) The operator may use actual volume records based upon direct aerial and field survey techniques, using the conversion factor of 1,000 pounds per cubic yard less a department approved deduction for cover material.

(C) The operator may use actual volume records based upon daily logs which record the source, type and measurement or estimate of each load using the conversion factors as specified in subsection (d) of this regulation.

(D) The operator of a landfill serving one county or an identifiable population of less than 20,000 may use a per capita waste generation rate

persede the requirements of K.A.R. 28-29-23. (Authorized by K.S.A. 1995 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994; amended Dec. 13, 1996.)

28-29-101. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994; revoked May 30, 2003.)

28-29-102. Location restrictions. (a) Airport safety.

(1) Each owner or operator of a new MSWLF unit and existing MSWLF unit which is located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft, shall demonstrate to the department that the unit is designed and operated so that the unit does not pose a bird hazard to aircraft.

(2) Each owner or operator proposing to site a new unit within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the federal aviation administration (FAA).

(3) The owner or operator shall place a copy of the demonstration in the operating record.

(4) For purposes of this subsection:

(A) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(B) "Bird hazard" means an increase in the likelihood of bird and aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(b) Floodplains.

(1) Owners or operators of new MSWLF units and existing MSWLF units located in 100-year floodplains must demonstrate to the department that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For purposes of this subsection:

(A) "Floodplain" means the lowland and relatively flat areas adjoining inland waters, including flood-prone areas that are inundated by the 100-year flood.

(B) "100-year flood" means a flood that has a 1% or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(C) "Washout" means the carrying away of solid waste by waters of the base flood.

(c) Wetlands.

(1) New MSWLF units shall not be located in wetlands, unless the owner or operator demonstrates to the department that:

(A) there is no practicable alternative to the proposed MSWLF that does not also involve wetlands;

(B) the construction and operation of the unit will not:

(i) cause or contribute to violations of any applicable Kansas water quality standard;

(ii) violate any applicable toxic effluent standard or prohibition under section 307 of the clean water act, 33 U.S.C. 1317;

(iii) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the endangered species act of 1973; and

(iv) violate any requirement under the marine protection, research, and sanctuaries act of 1972 for the protection of a marine sanctuary;

(C) the unit will not cause or contribute to significant degradation of wetlands. The owner or operator shall demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors:

(i) erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the unit;

(ii) erosion, stability, and migration potential of dredged and fill materials used to support the unit;

(iii) the volume and chemical nature of the waste managed in the unit;

(iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(v) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

(D) steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable, then

minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions, including restoration of existing degraded wetlands or creation of man-made wetlands; and

(E) sufficient information is available to make a reasonable determination with respect to these demonstrations.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For purposes of this subsection, "wetlands" means those areas that meet the definition provided in the "Corps of Engineers Wetlands Delineation Manual - Technical Report Y-87-1," as published January, 1987 by the Department of the Army Waterways Experiment Station, Corps of Engineers.

(d) Fault areas.

(1) New MSWLF units shall not be located within 60 meters (200 feet) of a fault that has had displacement in holocene time unless the owner or operator demonstrates to the department that an alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For the purposes of this subsection:

(A) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(B) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(C) "Holocene" means the most recent epoch of the quaternary period, extending from the end of the pleistocene epoch to the present.

(e) Seismic impact zones.

(1) New MSWLF units shall not be located in seismic impact zones, unless the owner or operator demonstrates to the department that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For the purpose of this subsection the following definitions shall apply:

(A) "Seismic impact zone" means an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.

(B) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(C) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term shall not include human-made materials, including fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(f) Unstable areas.

(1) Owners or operators of new MSWLF units and existing units located in an unstable area shall demonstrate to the department that engineering measures have been incorporated into the unit's design to ensure that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(A) on-site or local soil conditions that may result in significant differential settling;

(B) on-site or local geologic or geomorphologic features; and

(C) on-site or local human-made features or events both surface and subsurface.

(2) The owner or operator shall place a copy of the demonstration in the operating record.

(3) For purposes of this subsection:

(A) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the MSWLF structural components responsible for preventing releases from a landfill. Unstable areas may include poor foundation conditions, areas susceptible to mass movements, and karst terranes.

(B) "Structural components" means liners, leachate collection systems, final covers, run-on systems, run-off systems, and any other component used in the construction and operation of the

MSWLF that is necessary for protection of human health and the environment.

(C) "Poor foundation conditions" means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an MSWLF unit.

(D) "Areas susceptible to mass movement" means those areas of influence including areas characterized as having an active or substantial possibility of mass movement, where the movement of earth material at, beneath, or adjacent to the MSWLF unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement may include:

(i) landslides;
(ii) avalanches;
(iii) debris slides and flows;
(iv) soil fluction;
(v) block sliding; and
(vi) rock fall.

(E) "Karst terranes" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes may include:

(i) sinkholes;
(ii) sinking streams;
(iii) caves;
(iv) large springs; and
(v) blind valleys.

(g) Closure of existing MSWLF units.

(1) Existing units that cannot make the demonstration pertaining to airports, floodplains, or unstable areas, shall close by October 9, 1996, in accordance with K.A.R. 28-29-121 and conduct post-closure activities in accordance with K.A.R. 28-29-121.

(2) The deadline for closure required by subsection (g)(1) may be extended up to two years if the owner or operator demonstrates to the department that there is no:

(A) available alternative disposal capacity; and

(B) immediate threat to human health and the environment.

(h) Kansas historic preservation act. Each new MSWLF unit shall be located so as not to pose a threat of harm or destruction to the essential features of an irreplaceable historic or archaeological site that is listed pursuant to the Kansas historic preservation act, K.S.A. 75-2716 and 75-2724.

(i) Endangered species conservation act. Each new MSWLF unit shall be located so as not to:

(1) jeopardize the continued existence of any designated endangered species;

(2) result in the destruction or adverse modification of the critical habitat listed for such species; or

(3) cause or contribute to the taking of any endangered or threatened species of plant, fish or wildlife listed pursuant to the endangered species act 16 U.S.C. 1531 *et seq.*, or Kansas non-game and endangered species conservation act, K.S.A. 32-957 *et seq.*, and K.S.A. 32-1009, *et seq.*

(j) Buffer zones.

(1) No part of a newly permitted MSWLF unit shall be located closer than 152 meters (500 feet) from an occupied dwelling, school, or hospital that was occupied on the date when the owner or operator first applied for a permit to develop the unit or the facility containing the unit, unless the owner of such dwelling, school, or hospital consents in writing.

(2) All newly permitted MSWLF units shall maintain a minimum 46 meters (150 feet) buffer from the edge of the planned MSWLF unit to the owner's or operator's property line.

(3) The owner or operator may petition the director for a reduction in the buffer zone distances, provided the county commission of the county in which the landfill is located approves the request.

(k) Navigable streams.

(1) A new MSWLF unit shall not be located within one-half mile of a navigable stream used for interstate commerce.

(2) For purposes of this subsection, "navigable stream" means any water defined as navigable water of the United States under 33 CFR Part 329 as in effect on July 1, 1993.

(3) The provisions of this subsection shall not apply to:

(A) lateral expansion onto land contiguous to a permitted MSWLF in operation on July 1, 1991; or

(B) renewal of an existing permit for a permitted MSWLF on July 1, 1991.

(l) Public drinking water supplies.

(1) No new MSWLF shall be located within one mile of a surface water intake source for a public water supply system.

(2) For purposes of this subsection:

(A) "Surface water" means any water defined under K.A.R. 28-15-11.

(B) "Public water supply system" means any

system defined under K.A.R. 28-15-11. (Authorized by K.S.A. 1993 Supp. 65-3406; implementing K.S.A. 65-3401; effective Oct. 24, 1994.)

28-29-103. Small landfills. (a) Any owner or operator of a new or existing municipal landfill may request an exemption from the design requirements in K.A.R. 28-29-104, as amended, if these conditions are met:

(1) the MSWLF receives and disposes of less than 20 tons of municipal solid waste daily, based on an annual average;

(2) there is no evidence of groundwater contamination from the MSWLF;

(3) the MSWLF is in an area that annually receives less than or equal to 25 inches of precipitation; and

(4) the community or communities utilizing the MSWLF have no practicable waste management alternative.

(b) Each owner or operator requesting the small landfill exemption shall demonstrate compliance with the conditions in subsection (a) by submitting the following documentation to the department for review and approval:

(1) actual records of past operations or estimates of the amount of solid waste disposed on a daily basis to demonstrate that the MSWLF meets the condition in paragraph (a)(1);

(2) site-specific data demonstrating that the MSWLF meets the condition in paragraph (a)(2);

(3) climatic data obtained for a minimum 30-year averaging period demonstrating that the MSWLF meets the condition in paragraph (a)(3); and

(4) one of the following statements to demonstrate that the MSWLF meets the condition in paragraph (a)(4):

(A) a statement containing data showing to the department that the closest MSWLF is more than 75 miles away; or

(B) written certification, from the board of county commissioners in the county where the landfill is located, that a landfill located less than 75 miles away is not a practicable alternative.

(c) The owner or operator of each small landfill meeting the exemption criteria shall comply with the location restrictions, the operating standards, the closure and post-closure standards, and the financial assurance standards for municipal solid waste landfills.

(1) Each "existing small landfill" for the purposes of K.A.R. 28-29-103, as amended, means any area permitted for municipal solid waste disposal on or before October 9, 1993 and any area permitted for municipal solid waste disposal through a permit amendment prior to October 9, 1997 and contiguous to the area permitted before October 9, 1993.

(2) Each "new small landfill" means any area not permitted for municipal solid waste disposal prior to October 9, 1993 or not incorporated into an existing permit by amendment prior to October 9, 1997.

(d) Each existing small landfill meeting the exemption criteria in subsection (a) and receiving waste on or after October 9, 1997 shall comply with subsection (f), (g) or (h) of this regulation in order to demonstrate that naturally occurring geological conditions provide sufficient protection against groundwater contamination.

(e) Each new small landfill or unit meeting the exemption criteria in subsection (a) shall comply with subsection (f) of this regulation and shall be constructed with the following:

(1) a liner consisting of the following:

(A) a minimum of two feet of compacted clay with a hydraulic conductivity of no more than 1×10^{-6} cm/sec; and

(B) a leachate collection system; or

(2) *in situ* material or an alternate, approved constructed liner meeting the demonstration standards for groundwater modeling prescribed in subsection (g) or the liner performance standard prescribed in subsection (h) of this regulation. Alternate constructed liners shall be considered for approval by the department when these conditions are met:

(A) the technology or material has been successfully utilized in at least one application similar to the proposed application;

(B) methods for ensuring quality control during the manufacture and construction of the liner can be implemented; and

(C) the owner or operator can provide documentation in the operating record that the provisions set forth in this subsection have been satisfied.

(f) Groundwater monitoring, sampling, and analysis.

(1) The owner or operator of each landfill meeting the exemption criteria shall install a groundwater monitoring system developed by a qualified groundwater scientist as defined in K.A.R. 28-29-111 and approved by the depart-

(a) Permit application fees.

Mobile waste tire processor	$250
Waste tire collection center	$100
Waste tire processing facility	$250
Waste tire transporter	$100

(b) Annual permit renewal fees.

Mobile waste tire processor	$100
Waste tire collection center	$50
Waste tire processing facility	$100
Waste tire transporter	$50

(Authorized by K.S.A. 65-3424h; implementing K.S.A. 2006 Supp. 65-3424b; effective Oct. 26, 2007.)

PART 10.—FINANCIAL REQUIREMENTS

28-29-2101. Financial assurance for closure and postclosure. In K.A.R. 28-29-2101 through K.A.R. 28-29-2113, "facility" shall mean a solid waste disposal area, a solid waste processing facility, or both.

(a) Evidence of financial assurance. The owner or operator of each facility shall submit to the department evidence of financial assurance for the facility for the cost of closure, postclosure, or both, as specified in K.S.A. 65-3407, and amendments thereto. The financial assurance shall meet the following requirements:

(1) Be continuous during the active life of the facility and the required postclosure care period;

(2) be in an amount that is equal to or greater than the accepted or revised amount as specified in subsection (e) of this regulation;

(3) be available when needed; and

(4) be legally enforceable.

(b) Financial assurance methods.

(1) Allowable financial assurance methods shall consist of the following:

(A) A funded trust fund, as specified in K.A.R. 28-29-2103;

(B) a surety bond guaranteeing payment, as specified in K.A.R. 28-29-2104;

(C) a surety bond guaranteeing performance, as specified in K.A.R. 28-29-2105;

(D) an irrevocable letter of credit, as specified in K.A.R. 28-29-2106;

(E) an insurance policy, as specified in K.A.R. 28-29-2107;

(F) a corporate financial test, as specified in K.A.R. 28-29-2108;

(G) a corporate financial guarantee, as specified in K.A.R. 28-29-2109;

(H) a local government financial test, as specified in K.A.R. 28-29-2110;

(I) a local government guarantee, as specified in K.A.R. 28-29-2111;

(J) use of ad valorem taxing authority for a local government subdivision of the state that owns or operates a solid waste facility other than a municipal solid waste landfill, as specified in K.A.R. 28-29-2112; and

(K) the following simplified financial instruments, as specified in K.A.R. 28-29-2113:

(i) A simplified permit bond for facilities with a closure cost estimate of $100,000 or less;

(ii) a simplified irrevocable letter of credit for facilities with a closure cost estimate of $100,000 or less; and

(iii) an assigned certificate of deposit for facilities with a closure cost estimate of $25,000 or less.

(2) Any owner or operator may use a combination of instruments or methods as specified in these regulations, except that a method using a financial instrument guaranteeing performance shall not be used in combination with an instrument guaranteeing payment. Each method used in combination shall satisfy the requirements specified in these financial assurance regulations for its use.

(3) Any board of county commissioners that has established a dedicated fee fund pursuant to K.S.A. 65-3415f, and amendments thereto, may reduce the amount of financial assurance demonstrated by any other allowable method by the current balance accumulated in the dedicated fee fund at the time that the evidence of financial assurance is submitted.

(4) If the financial assurance is a purchased financial instrument, it shall be purchased from a financial, insurance, or surety institution meeting the quality and reliability standards suitable to institutions of that type and the standards specified in these financial assurance regulations.

(c) Calculation of financial assurance. The owner or operator of each facility shall meet the following requirements when calculating the amount of financial assurance for the current estimated cost to provide for closure, postclosure, or both.

(1) The owner or operator shall meet the following requirements to determine the area or capacity to be included in the calculation of estimated cost.

(A) For each solid waste processing facility, the amount of closure financial assurance shall be calculated as the cost of removing and disposing of the greatest volume of waste allowed by terms and

conditions of the permit, and all other costs relevant to certification of final closure, including certification.

(B) For each solid waste disposal area, the amount of closure financial assurance shall be calculated as the cost to complete final closure of the largest area to lack final cover at any one time before the next annual permit renewal. The calculated cost shall include the cost to complete all closure activities in a manner consistent with the approved facility closure plan.

(C) For each solid waste disposal area, the amount of postclosure financial assurance shall be calculated as the cost to be incurred for the largest area to have waste in place before the next annual permit renewal. The calculated cost shall include the cost to conduct the following, in a manner consistent with the approved facility postclosure plan, during the postclosure period of 30 years and any extensions of the postclosure period required by the secretary:

(i) Care and maintenance of the area, including all appurtenances; and

(ii) all required environmental monitoring.

(2) The owner or operator shall calculate the amount of financial assurance required by applying third-party costs to the activities listed in the closure plan and postclosure plan. The resulting amount shall not be discounted, nor shall any offset for the sale of recoverable materials be subtracted. Third-party costs shall be determined from one or more of the following sources:

(A) Representative costs supplied by the department;

(B) actual invoices paid by the owner or operator for the same or similar work;

(C) written bids from professional contractors having no other financial interest in the facility or its use; or

(D) authoritative costing tables issued by publishers recognized for their research into the costs of the activities to be priced.

(3) If the calculated amount does not include a specific allowance to pay for contingent events, the owner or operator shall add an amount equal to 10% of the total cost for the purpose of determining the amount of financial assurance required.

(4) The owner or operator shall submit the cost estimates on worksheets provided by the department or on other forms that contain the same information.

(d) When submissions are required. The owner or operator of each facility shall submit evidence of financial assurance to the department at the following times:

(1) Before the facility permit is issued by the secretary, including transferred permits;

(2) before a permit modification is issued by the secretary;

(3) annually during the active life of the facility, on or before the permit renewal date; and

(4) annually during the required period of postclosure, on or before the permit renewal date that was effective during the active life of the facility.

(e) Evaluation of amount of financial assurance.

(1) Upon receipt of the closure cost estimate, postclosure cost estimate, or both, from the owner or operator, the estimate or estimates shall be evaluated by the department to determine if the estimated amount of financial assurance is acceptable, according to the following criteria:

(A) The activities planned meet the requirements of the Kansas solid waste statutes and regulations, comply with all permit conditions, and are protective of public health and safety and the environment; and

(B) the method of estimating costs for the planned activities meets the requirements of this regulation.

(2) Revisions shall be made by the department in accordance with the evaluation, if the cost estimate factors are not acceptable.

(f) Annual updates to financial assurance. The owner or operator shall update the financial assurance amount, on or before the annual renewal date of each permit during the active life of the facility and annually during the required period of postclosure care, by recalculating the cost of closure, postclosure care, or both, using current dollars, or by the addition of an inflation factor to the amount accepted by the department for the prior year.

(1) If a change to any of the following has occurred that will change the cost of closure, postclosure, or both, the owner or operator shall recalculate the affected cost or costs, consistent with the change:

(A) The closure plan, as submitted or as approved;

(B) the postclosure plan, as submitted or as approved; or

(C) the conditions at the facility.

(2) If the inflation factor is used, the financial assurance instrument or other method of demonstrating financial assurance shall be adjusted to

the updated amount according to the following formula:

$$\frac{IPD_y}{IPD_{y-1}} \times FA_{y-1} = FA$$

where:

IPD_y represents the current annual implicit price deflator for the gross domestic product;

IPD_{y-1} represents the previous year's implicit price deflator for the gross domestic product;

FA_{y-1} represents the previous year's approved estimate of closure or postclosure, or both; and

FA represents the current estimated cost of closure or postclosure, or both.

(g) Failure of the financial assurance method, or an inadequate amount of financial assurance. Each owner or operator of a facility who obtains information that a financial assurance instrument or other method has failed to meet the standards established by these financial assurance regulations for its use, or that the amount of financial assurance provided has become inadequate for reasons other than general annual price inflation, shall provide alternate or increased financial assurance of the type and within the time periods specified in these financial assurance regulations, but not later than 90 days after obtaining the information.

(h) Release from the requirement to provide financial assurance. Each owner or operator shall be released from the requirement to provide financial assurance for a facility for closure or postclosure care, or both, when the owner or operator is released by the department from further obligation to perform closure activities, postclosure activities, or both, at the facility.

(i) Exception for certain closed municipal solid waste landfills. The financial assurance requirements of subsection (a) of this regulation shall not apply to closed municipal solid waste landfills that are exempted from K.A.R. 28-29-101 through K.A.R. 28-29-120 according to the closure dates specified in K.A.R. 28-29-100.

(j) Exception to the requirement for postclosure financial assurance for facilities other than municipal solid waste landfills. Postclosure financial assurance shall not be required by the secretary for a facility that is not a municipal solid waste landfill unless the secretary determines that recurring environmental monitoring is required during the entire postclosure period.

(k) Exception to the closure plan pricing requirements for waste tire permittees. No waste tire processing facility, waste tire collection center, mobile waste tire processor, or waste tire transporter permittee shall be subject to the closure plan pricing requirements of subsections (c) and (f) of this regulation. The permittee shall determine the amount of financial assurance according to the following criteria:

(1) Waste tire processing facilities and waste tire collection centers. The amount of financial assurance shall correspond to the closure cost estimate, as specified in K.A.R. 28-29-30.

(2) Mobile waste tire processors. The amount of financial assurance shall be $1,000.00.

(3) Waste tire transporters. The amount of financial assurance shall correspond to the average number of passenger tire equivalents (PTEs) transported per month, according to the following schedule:

PTEs transported	Financial assurance
0 through 1,000	$1,000.00
1,001 through 10,000	$5,000.00
more than 10,000	$10,000.00

(Authorized by K.S.A. 65-3406 and 65-3424h; implementing K.S.A. 2006 Supp. 65-3407 and K.S.A. 2006 Supp. 65-3424b; effective Feb. 24, 2000; amended Oct. 26, 2007.)

28-29-2102. Financial assurance for corrective action. Reference to the "facility" in these financial assurance regulations shall mean a solid waste disposal area or a solid waste processing facility, or both.

(a) Requirement to provide financial assurance. Each owner or operator of a facility who is required to undertake a corrective action program pursuant to the provisions of K.A.R. 28-29-114, or by order of any court of competent jurisdiction, shall provide evidence of financial responsibility for the cost of corrective action in the manner and form prescribed by these financial assurance regulations. Each owner or operator required to perform corrective action for a facility shall provide and maintain financial assurance that is continuous, adequate in amount, available when needed, and legally enforceable.

(b) Financial assurance methods. Allowable financial assurance methods shall be those specified in K.A.R. 28-29-2101(b).

(c) Provider of the financial assurance. The financial assurance for corrective action shall be supplied by one of the providers specified in K.A.R. 28-29-2101(c).

(d) Demonstration of financial assurance, when

required. Each owner or operator required to undertake a program of corrective action shall provide a demonstration of financial assurance to the department at the following times:

(1) Within 120 days following whichever of the following dates is earliest:

(A) The date that the selected remedy was filed with the department by the owner or operator according to the provisions of K.A.R. 28-29-114(b); or

(B) the date that the secretary informed the facility of the amount of financial assurance required based on a probable remedial cost estimate; and

(2) annually during the corrective action period, on or before the anniversary of the date the first financial assurance demonstration was required.

(e) Review of financial assurance demonstrations. Financial assurance demonstrations shall be reviewed by the department and either approved or disapproved. A financial assurance method that has been disapproved by the department shall be replaced with an alternate method as specified in these financial assurance regulations to maintain continuous assurance during the corrective action period. A purchased financial instrument that has been disapproved because of wording or the quality of the issuing institution, or for any other reason, shall be replaced by an instrument acceptable to the department or by another method listed in K.A.R. 28-29-2101(b)(1), to maintain continuous assurance.

(f) Calculation of required financial assurance.

(1) The financial assurance requirement shall be based upon the total cost accumulated in a detailed estimate of the cost of the corrective action plan for implementing the remedy approved or specified by the department according to K.A.R. 28-29-114(b).

(2) A probable remedial cost estimate for the financial assurance required to implement corrective measures at the facility may be developed by the secretary before a remedy is submitted by the facility and approved by the department.

(3) If a trust fund is selected to provide the financial assurance, a separate estimate shall be made of the cost to be incurred during each year of the corrective action plan.

(4) The corrective action plan shall be priced using one or more of the sources specified in K.A.R. 28-29-2101(f)(2).

(5) The total amount of the corrective action plan shall not be discounted, nor shall any offset for the sale of recoverable materials be subtracted.

(6) If the amount does not include a specific allowance to pay for contingent events, an amount equal to 10 percent of the total cost shall be added for the purpose of determining the amount of financial assurance required.

(g) Evaluation of amount of financial assurance. Upon receipt of a priced corrective action plan from the owner or operator, the plan shall be evaluated by the department to determine if the amounts calculated are sufficient for determining the amount of financial assurance required, or revisions shall be made by the department in accordance with the evaluation if the amounts are not sufficient. The adequacy of the physical actions planned and the pricing sources shall be considered in the departmental evaluation. Each owner or operator shall demonstrate financial assurance equal to the amount accepted or determined by the department.

(h) Annual updates to financial assurance. Each owner or operator shall update the financial assurance amount on or before the anniversary of the date the first financial assurance demonstration was required by this regulation. The financial assurance amount shall be updated by using one or more of the methods specified in K.A.R. 28-29-2101(h).

(i) Failure of the financial assurance method, or an inadequate amount of financial assurance. Each owner or operator required to process a corrective action plan who obtains information that a financial assurance instrument or other method in use has failed to meet the standards established by these financial assurance regulations for its use, or that the amount of financial assurance provided has become inadequate for reasons other than general annual price inflation, shall provide alternate or increased financial assurance of the type and within the time periods specified in these financial assurance regulations, but in no event later than 90 days after obtaining the information.

(j) Release from the requirement to provide financial assurance. Each owner or operator required to provide financial assurance for corrective action shall be released from the requirement when the department or any court having jurisdiction releases the owner or operator from further obligation to perform corrective action activities at the facility.

(k) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by

K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2103. Financial assurance provided by a funded trust fund. (a) Funded trust fund. Any owner or operator of a solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by establishing a trust fund that conforms to the requirements of this regulation and by submitting a copy of the trust agreement, with an original signature, to the department.

(1) Each owner or operator of a new facility shall submit to the department a copy of the trust agreement, with an original signature, for closure or postclosure, or both, before the permit is issued by the department.

(2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit to the department a copy of the trust agreement, with an original signature, within the times specified in K.A.R. 28-29-2102(d).

(3) The trustee financial institution shall meet the following criteria:

(A) Be unrelated to the owner or operator;

(B) have the authority to act as trustee for the facility in the state of Kansas; and

(C) be a trust operation regulated and examined by a state or federal agency.

(b) Form of the trust agreement.

(1) The wording of the trust agreement shall be identical to the wording in the document provided by the department.

(2) The trust agreement shall establish a trust account, referred to in this regulation as "the fund," for the receipt of annual payments into the fund and receipt of the earnings on the accumulated amount.

(3) Each owner or operator shall update schedule A of the trust agreement within 60 days following a change in the amount of the current closure, postclosure, or corrective action cost estimate covered by the agreement.

(c) Payments into the fund for closure and postclosure. The owner or operator shall annually make payments into the fund for closure or postclosure, or both, over the estimated life of the facility as approved by the department. The approved facility life shall be referred to in this regulation as the "pay-in period." The pay-in period shall be changed each time a new facility life is determined by the owner or operator and approved by the department. The pay-in period shall not exceed 30 years from the date a new facility is permitted or the date these financial assurance regulations become effective, whichever is later. Payments into the fund for closure or postclosure, or both, shall be calculated as follows:

(1) The first payment into the fund for a new facility shall be made before the permit is issued by the department. The first payment shall be equal to the current, approved estimate of closure or postclosure costs, or both, divided by the number of years in the pay-in period.

(2) The owner or operator shall make subsequent payments on or before the due date for each annual permit renewal. The amount of each subsequent payment shall be calculated by the following formula:

$$\frac{CE - CV}{Y} = P$$

where:

CE represents the current cost estimate for closure or postclosure, or both;

CV represents the current value of the fund. The current value of the fund shall be the current tax cost of the fund as reported in the trustee report unless market value is lower, in which case the lower value shall be used in the formula;

Y represents the number of years remaining in the pay-in period; and

P represents the amount of the required payment.

(3) Any owner or operator may accelerate payments into the fund or may deposit the full amount of the current estimate for closure or postclosure costs, or both, at the time the fund is established. After making the accelerated or full payments, the owner or operator shall maintain the fund at least in the amount it would have been if initial and annual payments had been made according to the requirements in paragraphs (c)(1) and (c)(2) of this regulation.

(4) If the owner or operator establishes a trust fund for closure, postclosure, or both, after having used another allowable method of providing financial assurance, the first payment into the fund shall be at least the amount that the fund would have contained if the trust fund had been used as the first method.

(5) After the pay-in period is complete, whenever the current approved cost estimate for closure or postclosure, or both, is changed, the owner or operator shall compare the new estimate with

the trustee's most recent report of the current value of the fund and, if the fund is deficient, shall deposit the amount of deficiency on or before the date required by K.A.R. 28-29-2101(i).

(6) After the pay-in period is complete, if the value of the fund exceeds the current approved estimate of closure or postclosure costs, or both, or if the owner or operator substitutes another approved method of providing financial assurance, the owner or operator may submit a request to the department for return of the excess amount. The request shall be evaluated by the department. The requested amount shall be approved, changed, or denied. The trustee shall make payment from the fund in the amount determined by the department's evaluation.

(d) Reimbursement from the closure or postclosure fund. After beginning final closure, and annually during the postclosure period, the owner or operator or another authorized person may request reimbursement for the costs incurred in carrying out the actions required by the approved closure or postclosure plan, or both. The reimbursement request shall include documentation for the costs to be reimbursed from the fund. The request shall be evaluated by the department. Reimbursement may be authorized by the department to the extent that, after the reimbursement is issued by the trustee, the fund still contains the amount required to complete closure or postclosure, or both. The trustee shall make payment from the fund in the amount determined by the department's evaluation.

(e) Payments into the fund for corrective action. Each owner or operator shall make payments into the fund for corrective action annually during the first half of the approved corrective action period. The first half of the corrective action period shall be the "pay-in period." The pay-in period shall be changed at any time that a new corrective action period is determined by the owner or operator and approved by the department. The pay-in period shall not exceed seven years beginning on the date these financial assurance regulations become effective, or 120 days after the date determined by K.A.R. 28-29-2102(d), whichever is later. Payments into the fund for corrective action shall be calculated as follows:

(1) The first payment into the fund shall be at least in the amount of half of the approved estimate of the total cost of corrective action for the entire corrective action period, divided by the number of years in the pay-in period.

(2) The amount of each subsequent payment shall be determined by the following formula:

$$\frac{RB - CV}{Y} = P$$

where:

RB represents the required balance, defined as the total amount of corrective action cost estimated to be incurred in the last half of the corrective action period;

CV represents the current value of the trust fund. The current value of the fund shall be the current tax cost of the fund as reported in the trustee report unless market value is lower, in which case market value shall be used in the formula;

Y represents the number of years remaining in the pay-in period; and

P represents the amount of the required payment.

(3) Any owner or operator may accelerate payments into the fund or may deposit the full amount of the required balance at the time the fund is established. After making the accelerated or full payments, the owner or operator shall maintain the fund at least in the amount it would have been if initial and annual payments had been made according to the requirements in paragraphs (e)(1) and (e)(2) of this regulation.

(4) If the owner or operator establishes a corrective action trust fund after having used another allowable method of providing financial assurance, the first payment into the fund shall be at least the amount that the fund would have contained if the trust fund had been used as the first method.

(5) After the pay-in period is complete, whenever the current estimated cost of corrective action for the remaining corrective action period exceeds the amount of the current value of the fund, the owner or operator shall deposit the deficiency on or before the deadline specified in K.A.R. 28-29-2102 (i).

(f) Reimbursement from the corrective action fund. After the pay-in period is complete or after the required balance of the fund is reached, the owner or operator or another authorized person may request reimbursement for the costs incurred in carrying out the actions required by the corrective action plan. The reimbursement request shall include documentation of the costs to be reimbursed from the fund. The request shall be evaluated by the department. Reimbursement

may be authorized by the department to the extent that, after the reimbursement is issued by the trustee, the fund still contains the amount required to complete the corrective action plan. The trustee shall make payment from the fund in the amount determined by the department's evaluation.

(g) Termination of the trust agreement. Any owner or operator may request termination of the trust agreement and return of any monies remaining in the fund if any of the following conditions is met:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation to provide financial assurance for closure, postclosure, corrective action, or any combination of these, at the permitted facility.

(3) The owner or operator completes corrective action required by order of any court of competent jurisdiction and is released from further obligation by the court at the permitted facility.

(h) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2104. Financial assurance provided by a surety bond guaranteeing payment. (a) Financial guarantee bond. Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a financial guarantee bond that conforms to the requirements of this regulation and by submitting the original bond to the department.

(1) Each owner or operator of a new facility shall submit to the department the bond for closure or postclosure, or both, before the permit is issued by the department.

(2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the bond to the department within the times specified in K.A.R. 28-29-2102(d).

(3) The surety institution shall meet the following criteria:

(A) Be unrelated to the owner or operator;

(B) have the authority to issue surety bonds in Kansas; and

(C) be listed as an acceptable surety institution on federal bonds.

(b) Form of the financial guarantee bond. The wording of the financial guarantee bond shall be identical to the wording in the document provided by the department. If the penal sum of the bond is increased during the life of the bond, the owner or operator shall provide written acceptance of the new amount, indicated by a signed acceptance placed on the certificate of increase issued by the surety institution. The original signed and accepted certificate of increase shall be filed with the department.

(c) Standby trust fund. Each owner or operator who uses a financial guarantee bond to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original financial guarantee bond. Under the terms of the bond, all payments from the penal sum shall be deposited by the surety institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirements of this regulation, the following shall not be required:

(1) Payments into the fund as specified in K.A.R. 28-29-2103(c) or (e);

(2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103(b)(3);

(3) annual valuations as required by the trust agreement; and

(4) notices of nonpayment as required by the trust agreement.

(d) Provisions of the financial guarantee bond for closure and postclosure. The financial guarantee bond for closure or postclosure, or both, shall require that the owner or operator perform one of the following:

(1) Fund the standby trust fund in the amount of the penal sum of the bond before beginning final closure of the facility;

(2) fund the standby trust fund in the amount of the penal sum of the bond within 15 days after an administrative order issued by the department to begin closure becomes final, or within 15 days after an order to begin final closure is issued by any court of competent jurisdiction; or

(3) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the department of a notice of cancellation from the surety institution.

(e) Provisions of the financial guarantee bond for corrective action. A financial guarantee bond for corrective action shall require that the owner or operator perform one of the following:

(1) Fund the standby trust fund in the amount of the penal sum of the bond before beginning corrective action at the facility;

(2) fund the standby trust fund in the amount of the penal sum of the bond within 15 days after an administrative order issued by the department to begin corrective action becomes final, or within 15 days after an order to begin corrective action is issued by any court of competent jurisdiction; or

(3) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval for the assurance provided, within 90 days after receipt by both the owner or operator and the department of a notice of cancellation from the surety institution.

(f) Liability of the surety institution. Under terms of the bond, the surety institution shall become liable on the bond obligation if the owner or operator fails to perform as guaranteed by the bond.

(g) Penal sum of the bond. The penal sum of the bond for closure, postclosure, or both, shall be at least the amount of the current cost estimate for closure, postclosure, or both. The penal sum of the bond for corrective action shall be at least the amount of the current cost estimate for corrective action for the entire corrective action period.

(h) Increase in the penal sum of the bond. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in these financial assurance regulations to cover the increase. Whenever the current cost of closure, postclosure, or corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the penal sum of the bond. The request shall be evaluated by the department, and the amount shall be decreased consistent with the department's evaluation.

(i) Cancellation of the bond by the surety institution. Under terms of the bond, the surety institution may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days following the date by which the notice of cancellation has been received by both the owner or operator and the department, as evidenced by the return receipts.

(j) Cancellation of the bond by the owner or operator. The owner or operator may request cancellation of the bond from the department if any of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.

(3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.

(k) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2105. Financial assurance provided by a surety bond guaranteeing performance. (a) Performance guarantee bond. Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a performance guarantee bond that conforms to the requirements of this regulation and by submitting the original bond to the department.

(1) Each owner or operator of a new facility shall submit to the department the bond for closure or postclosure, or both, before the permit is issued by the department.

(2) Each owner or operator required to provide financial assurance for a corrective action plan

shall submit the bond to the department within the times specified in K.A.R. 28-29-2102(d).

(3) The surety institution shall meet the following criteria:

(A) Be unrelated to the owner or operator;

(B) have the authority to issue surety bonds in Kansas; and

(C) be listed as an acceptable surety institution on federal bonds.

(b) Form of the performance guarantee bond. The wording of the performance guarantee bond shall be identical to the wording in the document provided by the department. If the penal sum of the bond is increased during the life of the bond, the owner or operator shall provide written acceptance of the new amount, indicated by a signed acceptance placed on the certificate of increase issued by the surety institution. The original signed and accepted certificate of increase shall be filed with the department.

(c) Standby trust fund. Any owner or operator who uses a performance guarantee bond to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original performance guarantee bond. Under the terms of the bond, all payments from the penal sum shall be deposited by the surety institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirement of this regulation, the following shall not be required:

(1) Payments into the fund as specified in K.A.R. 28-29-2103 (c) or (e);

(2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103 (b)(3);

(3) annual valuations as required by the trust agreement; and

(4) notices of nonpayment as required by the trust agreement.

(d) Provisions of the performance guarantee bond for closure and postclosure. The performance guarantee bond for closure or postclosure, or both, shall require that the owner or operator perform either of the following:

(1) Perform final closure or postclosure, or both, in accordance with the closure or postclosure plan, or both, and any other requirements of the permit and the department or a court of competent jurisdiction whenever required to do so; or

(2) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the department have received a notice of cancellation from the surety institution.

(e) Provisions of the performance guarantee bond for corrective action. A performance guarantee bond for corrective action shall require that the owner or operator perform either of the following:

(1) Perform corrective action according to the corrective action plan or according to an order from the department or any court of competent jurisdiction whenever required to do so; or

(2) provide alternate financial assurance as specified in these financial assurance regulations and obtain the department's written approval for the assurance provided, within 90 days after the date by which both the owner or operator and the department have received a notice of cancellation from the surety institution.

(f) Liability of the surety institution. Under terms of the bond, the surety institution shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(g) Penal sum of the bond. The penal sum of the bond for closure, postclosure, or both, shall be at least the amount of the current cost estimate for closure or postclosure, or both. The penal sum of the bond for corrective action shall be at least the amount of the current cost estimate for corrective action for the entire corrective period.

(h) Increase in the penal sum of the bond. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the penal sum of the bond. The request shall be evaluated by the department,

and the amount shall be decreased consistent with the department's evaluation.

(i) Cancellation of the bond by the surety institution. Under terms of the bond, the surety institution may cancel the bond by sending notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days following the date by which the notice of cancellation has been received by both the owner or operator and the department, as evidenced by the return receipts.

(j) Cancellation of the bond by the owner or operator. The owner or operator may request cancellation of the bond from the department if any of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.

(3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.

(k) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2106. Financial assurance provided by an irrevocable letter of credit. (a) Letter of credit. Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a letter of credit that conforms to the requirements of this regulation and by submitting the original letter of credit to the department.

(1) Each owner or operator of a new facility shall submit to the department the letter of credit before the permit is issued by the department.

(2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the letter of credit to the department within the times specified in K.A.R. 28-29-2102(d).

(3) The institution issuing the letter of credit shall meet the following criteria:

(A) Be unrelated to the owner or operator;

(B) be authorized to issue letters of credit in Kansas; and

(C) conduct letter of credit activities that are regulated by an agency of the state or federal government.

(b) Form of the letter of credit. The wording of the letter of credit shall be identical to the wording in the document provided by the department. If the amount of the letter of credit is changed or the expiration date is extended, an original amendment to the letter of credit shall be filed with the department.

(c) Standby trust fund. Any owner or operator who uses a letter of credit to satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, shall also establish a standby trust fund. A copy of the standby trust agreement with an original signature shall be submitted to the department along with the original letter of credit. Under the terms of the letter of credit, all payments from the penal sum shall be deposited by the issuing institution directly into the standby trust fund, in accordance with instructions from the department. The standby trust fund shall conform to the requirements specified in K.A.R. 28-29-2103, except that, until the trust account is funded pursuant to the requirements of this regulation, the following shall not be required:

(1) Payments into the fund as specified in K.A.R. 28-29-2103 (c) or (e);

(2) updates to schedule A of the trust agreement as specified in K.A.R. 28-29-2103(b)(3);

(3) annual valuations as required by the trust agreement; and

(4) notices of nonpayment as required by the trust agreement.

(d) Provisions of the letter of credit. The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall require that the expiration date be automatically extended for a period of at least one year on the expiration date and on each succeeding expiration date, unless 120 days before the current expiration date the issuing institution notifies both the owner or operator and the department by certified mail of a decision not to extend the expiration date. Under terms of the letter of credit, the 120-day period shall begin on the date by which both the owner or operator and the department have received the notice, as evidenced by the return receipts.

(e) Amount of the letter of credit. The letter of credit for closure, postclosure, or both, shall be

issued for at least the amount of the current cost of closure or postclosure, or both, whichever is greater. The letter of credit for corrective action shall be issued for at least the amount of the current cost estimate for corrective action during the entire corrective action period.

(f) Increases in the amount of the letter of credit. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, increases to an amount greater than the amount of the letter of credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the letter of credit to be increased to the new amount and submit evidence of the increase to the department, or obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the current cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the amount of the letter of credit. The request shall be evaluated by the department, and the amount shall be decreased consistent with the department's evaluation.

(g) Failure to perform closure, postclosure, and corrective action. The amount of the letter of credit, in whole or in part, shall be drawn by the department following a determination by the department of either of the following:

(1) That the owner or operator has failed to perform closure, postclosure, or corrective action, or any combination of these, in accordance with the closure, postclosure, or corrective action plan, or any combination of these, when required; or

(2) that the owner or operator has failed to perform according to the terms and conditions of the permit.

(h) Failure to supply alternate financial assurance. If the owner or operator does not establish alternate financial assurance as specified by this regulation and does not obtain written approval for its use from the department within 90 days after the date by which both the owner or operator and the department have received a notice from the issuing institution that it has decided not to renew the letter of credit beyond the current expiration date, the amount of the letter of credit may be drawn by the department.

(i) Termination of the letter of credit by the owner or operator. The owner or operator may request termination of the letter of credit if any of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation for closure or postclosure, or both, at the facility.

(3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.

(j) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2107. Financial assurance provided by insurance. (a) Insurance policy. Any owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining an insurance policy that conforms to the requirements of this regulation and by submitting to the department a copy of the insurance policy with an original signature, including all riders and endorsements, and an insurance certificate.

(1) The owner or operator of a new facility shall submit the insurance policy, riders, endorsements, and certificate to the department before the permit is issued by the department.

(2) Each owner or operator required to provide financial assurance for a corrective action plan shall submit the insurance policy, riders, endorsements, and certificate to the department within the times specified in K.A.R. 28-29-2102 (d).

(3) The insuring institution shall meet the following criteria:

(A) Be unrelated to the owner or operator;

(B) be licensed to transact the business of insurance by an agency of a state; and

(C) be listed as a surplus or excess lines carrier in Kansas.

(b) Form of the insurance certificate. The wording of the insurance certificate shall be identical to the wording in the document provided by the department.

(c) Amount of insurance. The insurance policy shall be issued for a face amount at least equal to the current cost estimate for closure or postclosure, or both, or at least in the amount of the current cost estimate for corrective action for the entire corrective action period, exclusive of legal

defense costs. The term "face amount" shall mean the total amount the insurer is obligated to pay under the policy. Actual payments under the policy by the insurer shall not change the face amount, although the future liability of the insurer shall be lowered by the amount of the payments.

(d) Provisions of the insurance policy. An insurance policy issued for closure, postclosure, corrective action, or a combination of these, shall guarantee that funds are available to pay for the actions required by the closure plan, postclosure plan, corrective action plan, or any combination of these, whenever required. The policy shall also guarantee that once final closure, postclosure, corrective action, or any combination of these, begins, the insurer will be obligated to disburse funds up to the face amount of the policy, at the direction of the department. The insurer shall not exercise discretion to determine whether the expenses incurred for closure, postclosure, corrective action, or any combination of these, are ordinary, necessary, or prudent, if disbursement is required by the department.

(e) Reimbursement of expenditures. After closure, postclosure, or corrective action, or any combination of these, has begun, an owner or operator or any other authorized person may request reimbursement of expenditures by submitting itemized statements with documentation to the department. The itemized statements shall be evaluated by the department. The expenditures listed shall be approved or disapproved by the department. After evaluating the itemized statements, payment from the insurer for approved expenditures may be authorized by the department if the remaining face amount of the insurance policy is sufficient to cover any remaining costs of closure, postclosure, corrective action, or any combination of these. If the department believes that future costs of closure, postclosure, corrective action, or any combination of these, will exceed the remaining face amount of the policy, authorization for payment may be withheld by the department.

(f) Requirement to maintain the insurance policy in force. The owner or operator shall maintain the insurance policy for closure, postclosure, corrective action, or any combination of these, in force until the department consents, in writing, to its termination. Failure to pay the premium when due, without substitution of alternate financial assurance as specified by K.A.R. 28-29-2101(b), shall constitute a violation of these regulations. The owner or operator shall be in violation if the department receives notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than on the date the policy is actually terminated.

(g) Assignment of the insurance to successive owners or operators. Each policy of insurance shall contain a provision allowing assignment of the policy to a successor owner or operator. This assignment may be conditional upon consent of the insurer, which shall not be unreasonably withheld.

(h) Cancellation of the insurance by the insurer. The policy of insurance for closure, postclosure, corrective action, or any combination of these, shall stipulate that the insurer not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to both the owner or operator and the department. The cancellation, termination, or failure to renew shall not occur during the 120 days beginning with the date by which both the owner or operator and the department have received notice, as evidenced by the return receipts. Cancellation, termination, or failure to renew shall not occur, and the policy shall remain in full force and effect if, on or before the date of expiration, one or more of the following events occur:

(1) The department determines the facility has been abandoned.

(2) The facility permit is terminated or revoked by the department, or a new permit is denied.

(3) The commencement of closure, postclosure, or corrective action, or any combination of these, activities is required by the department or any court of competent jurisdiction.

(4) The owner or operator is named as a debtor in a voluntary or involuntary proceeding under any state or federal bankruptcy law.

(5) The owner or operator fails to provide alternative financial assurance in a form and amount acceptable to the department.

(6) The premium due is paid.

(i) Increased cost estimates. During the active life of the facility, whenever the current cost estimate of closure, postclosure, corrective action, or of any combination of these, increases to an

amount greater than the face amount of the insurance policy, the owner or operator, within 60 days after the increase, shall either cause the face amount of the policy to be increased to an amount at least equal to the current cost estimate of closure, postclosure, corrective action, or any combination of these, and submit evidence of the increase to the department, or shall obtain other financial assurance as specified in K.A.R. 28-29-2101(b) to cover the increase. Whenever the estimated cost of closure, postclosure, corrective action, or any combination of these, decreases, the owner or operator may request approval from the department to decrease the face amount of the policy. The request shall be evaluated by the department, and a decrease in the amount shall be allowed by the department, consistent with its evaluation.

(j) Annual adjustments to the face amount of the policy. Beginning on the date that liability to make payments pursuant to a policy for postclosure begins, the insurer shall annually increase the face amount of the policy. This increase shall be based on the face amount of the policy, less any payments made exclusive of legal defense costs, multiplied by an amount equivalent to 85 percent of the most recent investment rate or 85 percent of the equivalent coupon-issue yield rate announced by the U.S. department of the treasury for 26-week treasury securities.

(k) Termination of the insurance by the owner or operator. The owner or operator may request cancellation of the insurance policy from the department if either of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department or any court of competent jurisdiction from further obligation for closure, postclosure, corrective action, or any combination of these, at the facility.

(l) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2108. Financial assurance provided by the corporate financial test. (a) Corporate financial test. Any corporate owner or operator of a permitted solid waste disposal area or processing facility may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by passing a financial test based on the current financial condition of the permitted corporation as specified in this regulation. Related corporations may not be summed or otherwise combined for the purpose of the financial test, but majority-owned subsidiary corporations of the permitted corporation may be consolidated.

(b) The financial component.

(1) The owner or operator shall satisfy one of the following three conditions:

(A) A current rating for its senior unsubordinated debt of AAA, AA, A, or BBB, as issued by Standard & Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;

(B) a ratio of less than 1.5, obtained by dividing total liabilities by net worth; or

(C) a ratio of greater than 0.10, obtained by dividing the sum of net income plus depreciation, depletion, and amortization, minus $10 million, by total liabilities.

(2) The tangible net worth of the owner or operator shall be greater than either of the following:

(A) The sum of current closure, postclosure, and corrective action cost estimates and any other environmental obligations, including guarantees, covered by the financial test plus $10 million; or

(B) $10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities in the financial statements, if all of the current closure, postclosure, and corrective action costs and any other environmental obligations covered by the financial test are recognized as liabilities in the owner's or operator's audited annual financial statements.

(3) The owner or operator shall have assets located in the United States amounting to at least the sum of current closure, postclosure, and corrective action cost estimates and any other environmental obligations or guarantees covered by the financial test as described in subsection (d) of this regulation.

(c) Record keeping and reporting requirements.

(1) The owner or operator shall place a copy of the following items in the facility's operating record and file the originals with the department:

(A) A letter signed by the owner's or operator's chief financial officer that is identical to the form provided by the department and that meets the following criteria:

(i) Lists all the current cost estimates for clo-

sure, postclosure, and corrective action and any other environmental obligations or guarantees covered by any financial test under state or federal laws and regulations in any jurisdiction; and

(ii) provides evidence demonstrating that the permitted corporate entity meets the requirements of the financial component of subsection (b) of this regulation;

(B) a copy of the permitted corporate entity's most recent corporate annual financial statements containing a report of independent certified public accountants, including an unqualified opinion. An adverse opinion, disclaimer of opinion, or qualified opinion shall be cause for the department to disapprove use of the corporate financial test. A qualified opinion may be evaluated by the department. Use of the financial test may be approved or disapproved by the department based on its evaluation;

(C) a special report of independent certified public accountants based on applying agreed-upon procedures engaged in accordance with professional auditing standards and stating the following:

(i) The accountant has compared the data in the chief financial officer's letter that is specified as coming from the most recent year-end audited financial statements to the audited financial statements; and

(ii) in connection with this procedure, the accountant found the data to be in agreement; and

(D) if the chief financial officer's letter provides a demonstration that the permitted corporate entity has assured environmental obligations in the manner provided in paragraph (b)(2)(B) of this regulation, a special report of independent certified public accountants that meets the following criteria:

(i) Provides verification that all of the environmental obligations covered by the financial test have been recognized as liabilities in the most recent annual financial statements;

(ii) describes the methods used to measure and report on these obligations; and

(iii) provides verification that the tangible net worth of the permitted corporate entity is at least $10 million plus the amount of any guarantees provided.

(2) After the initial placement of the items listed in paragraph (c)(1) of this regulation in the facility operating record and the initial filing of the originals with the department, the owner or operator shall annually update the information in the operating record and file the updated originals with the department. The updated information shall be placed in the operating record and filed with the department within 90 days following the close of the owner's or operator's most recently completed fiscal year.

(3) The owner or operator shall no longer be required to submit the items specified in paragraph (c)(1) of this regulation or otherwise comply with the requirements of this regulation if any of the following occurs:

(A) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(B) The owner or operator is released by the department from further obligation for closure, or postclosure, or both, at the facility.

(C) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.

(4) If the owner or operator determines that the permitted corporate entity no longer meets the requirements of subsection (b) of this regulation, the owner or operator shall, within 120 days following the owner's or operator's most recent fiscal year end, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department for its use.

(5) Based on the department's reasonable belief that the owner or operator may no longer meet the requirements of subsection (b) of this regulation, the owner or operator may be required by the department at any time to provide reports of its financial condition, including or in addition to current financial test documentation as specified in subsection (c) of this regulation, for evaluation. If the department evaluation results in a determination that the owner or operator no longer meets the requirements to use the financial test, the owner or operator shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b).

(d) Calculation of costs to be assured. Each owner or operator using the corporate financial test to provide financial assurance for closure, postclosure, and corrective action shall combine the current cost estimates for the permitted facility with all other environmental obligations or guarantees also assured by any financial test in any local, state, federal, or foreign jurisdiction. The combined environmental cost shall then be used

in the financial test calculations provided to the department by the owner or operator. The environmental obligations of consolidated subsidiary corporations that are assured by the financial test shall also be included in the combined environmental obligations covered by the test.

(e) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2109. Financial assurance provided by the corporate guarantee. (a) Corporate guarantee. Any owner or operator of a permitted solid waste disposal area or processing facility may meet the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a written guarantee for closure, postclosure, or corrective action costs, or any combination of these as specified in this regulation.

(1) The guarantor shall comply with the following:

(A) The requirements for owners or operators using the corporate financial test as specified in K.A.R. 28-29-2108(b);

(B) the record keeping and reporting requirements in K.A.R. 28-29-2108(c); and

(C) the terms of the guarantee.

(2) The guarantor shall be one of the following:

(A) The direct or higher-tier parent corporation of the owner or operator; or

(B) a corporation having the same parent corporation as the owner or operator.

(b) Form of the corporate guarantee. The guarantor shall provide a written guarantee that is worded identically to the document provided by the department.

(c) Effective date of the guarantee. A guarantee of closure, postclosure, or both, for a new permit shall be in force before the permit is issued by the department. A guarantee for corrective action shall be in force within the times specified in K.A.R. 28-29-2102 (d).

(d) Record keeping and reporting requirements. Copies of the guarantee, with original signatures, shall be placed in the facility operating record of the owner or operator and filed with the department, accompanied by the documents specified for use by the owner or operator in K.A.R. 28-29-2108(c), that shall be completed using the financial information and reports of the guarantor corporation. These documents shall be updated and filed annually.

(e) Consideration for the guarantee. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer shall describe the value received in consideration for the guarantee.

(f) Provisions of the guarantee. The terms of the written guarantee shall specify the following remedies:

(1) If the owner or operator fails to perform closure, postclosure, corrective action, or any combination of these, for the permitted facility covered by the guarantee when required by the department or any court of competent jurisdiction, the guarantor shall perform either of the following remedies:

(A) Perform or pay a third party to perform closure, postclosure, corrective action, or any combination of these, as required by the department or any court of competent jurisdiction; or

(B) establish a fully funded trust fund as specified in K.A.R. 28-29-2103, in the name of the owner or operator, in the amount of the current cost estimate for closure, postclosure, corrective action, or any combination of these, whichever is greatest.

(2) The guarantee shall remain in effect unless the guarantor sends prior notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days beginning on the date by which both the owner or operator and the department have received the notice of cancellation, as evidenced by the return receipts.

(3) If the guarantee is canceled, the owner or operator shall, within 90 days following the date by which both the owner or operator and the department have received the cancellation notice, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain the approval of the department for its use. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor shall provide the alternate financial assurance in the name of the owner or operator within 120 days following the date by which both the department and the owner or operator have received the cancellation notice.

(g) Failure of the guarantee. If the corporate guarantor no longer meets the requirements of K.A.R. 28-29-2108(b), the owner or operator

shall, within 90 days, obtain alternate financial assurance and obtain the approval of the department for its use. If the owner or operator fails to provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) within the 90-day period, the guarantor shall, within the next 30 days, provide the alternate financial assurance in the name of the owner or operator.

(h) Release of the guarantee. The owner or operator shall be no longer required to meet the requirements of this regulation if any of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation for closure, postclosure, or both, at the permitted facility.

(3) The owner or operator completes required corrective action and is released from further obligation by the department or any court of competent jurisdiction.

(i) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2110. Financial assurance provided by the local government financial test. (a) Local government financial test. Each owner or operator of a permitted solid waste disposal area or processing facility that is a local government subdivision of the state of Kansas may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, for the closure, postclosure, or corrective action costs, or any combination of these, for a municipal solid waste landfill by use of a local government financial test as specified in this regulation.

(b) Definitions. The following terms used in this regulation shall be defined as specified below:

(1) "Annual debt service" means the principal and interest due on outstanding long-term debt during a stated time period, typically the current fiscal year, and payments on capital lease obligations during the same period.

(2) "Cash plus marketable securities" means all the cash and marketable securities held by the local government on the last day of a fiscal year but shall exclude the following:

(i) Cash and marketable securities designated to satisfy past obligations; and

(ii) cash and investments held in fiduciary funds.

(3) "Current year" means the most recently completed fiscal year.

(4) "Deficit" means total annual revenues minus total annual expenditures.

(5) "Long-term debt issued in the current year" means the amount of principal borrowing actually received during the current year from the issue of obligations due more than one year from the date of issue but shall exclude the following:

(i) The amount of capital lease liability incurred during the year; and

(ii) the proceeds of any long-term borrowing in the current year that remains in the capital projects fund at year's end.

(6) "Nonroutine capital expenditures" means capital expenditures of the capital projects fund and expenditures identified as capital outlays or asset additions in the audited annual financial statements of other governmental funds and enterprise funds.

(7) "Total annual expenditures" means the total of all expenditures but shall exclude the following:

(i) Debt principal repayments;

(ii) nonroutine capital expenditures; and

(iii) the expenditures of fiduciary or other trust funds managed by a local government on behalf of specific third parties.

(8) "Total annual revenues" means revenues from all taxes, fees, investment earnings, and intergovernmental transfers but shall exclude the following:

(i) The proceeds from borrowing and asset sales; and

(ii) revenues of fiduciary or other trust funds managed by a local government on behalf of specific third parties.

(c) The financial component.

(1) If the owner or operator has outstanding general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, the bonds shall have a current bond rating of AAA, AA, A, or BBB, as issued by Standard & Poor's, or a current rating of Aaa, Aa, A, or Baa, as issued by Moody's.

(2) If the owner or operator does not have outstanding and rated general obligation bonds, the owner or operator shall meet each of the following financial ratios based on the owner's or operator's most recent audited annual financial statements:

(A) A ratio of cash plus marketable securities divided by total annual expenditures equal to or greater than 0.05, referred to as the "liquidity ratio";

(B) a ratio of annual debt service divided by total annual expenditures equal to or less than 0.20, referred to as the "debt service ratio"; and

(C) a ratio of long-term debt issued in the current year divided by nonroutine capital expenditures of the current year equal to or less than 2.00, referred to as the "use of funds ratio."

(3) The owner or operator's annual financial statements shall be audited by an independent certified public accountant. The financial statements shall be prepared in conformity with one of the following accounting methods:

(A) Generally accepted accounting principles for governments; or

(B) a prescribed basis of accounting that demonstrates compliance with the cash basis and budget laws of the state of Kansas.

(4) An owner or operator who prepares the annual financial statements in conformity with generally accepted accounting principles for governments and uses the financial ratio test method of financial assurance may omit the ratio test stated in paragraph (c)(2)(C) of this regulation.

(5) A local government owner or operator shall not be eligible to use the financial test to assure closure, postclosure, corrective action, or any combination of these, for a municipal solid waste landfill if any of the following conditions exists:

(A) The owner or operator is currently in default on any outstanding general obligation bonds.

(B) The owner or operator has any general obligation bonds outstanding that are rated lower than BBB, as issued by Standard & Poor's, or Baa, as issued by Moody's.

(C) The owner or operator operated at a deficit equal to or greater than five percent of the total annual revenue in each of the two most recently completed fiscal years.

(D) The owner or operator receives an adverse opinion, disclaimer of opinion, or qualification of opinion in the report of independent certified public accountants accompanying the audited financial statements for the most recently completed fiscal year. A qualified opinion may be evaluated by the department. Use of the financial test may be approved or disapproved by the department based on its evaluation.

(d) Public notice component. The local government owner or operator shall place a reference to the cost of closure, postclosure, corrective action, or any combination of these, that is assured by the local government financial test in its comprehensive annual financial report or other audited annual financial report during each year in which the owner or operator is required to provide financial assurance by these financial assurance regulations. Disclosure shall be made in a note attached to the audited annual financial statements and shall include the following:

(1) The nature and source of the requirements to conduct closure, postclosure, corrective action, or any combination of these;

(2) the liability reported or calculated at the balance sheet date;

(3) the estimated total cost of closure, postclosure, corrective action, or any combination of these, remaining to be recognized following the reported balance sheet date;

(4) the percentage of landfill capacity on the reported balance sheet date;

(5) the estimated remaining landfill life in years, or the estimated period of corrective action remaining; and

(6) the method projected for use or the method currently in use to fund the actual costs of closure, postclosure, corrective action, or any combination of these, when required.

(e) Record keeping and reporting requirements.

(1) The owner or operator shall place a copy of the following items in the facility's operating record and shall file the originals with the department:

(A) A letter signed by the local government's chief financial officer that is identical to the form provided by the department and that includes the following:

(i) A list of all the current cost estimates covered by a financial test, including the municipal solid waste landfill and any other environmental obligations or guarantees assured by financial test in any jurisdiction;

(ii) a certification that the local government meets the conditions of subsection (c) of this regulation required for use of either the bond rating or the financial ratio method of the local government financial test;

(iii) a certification that the local government has satisfied the public notice component requirements of subsection (d) of this regulation; and

(iv) a certification that the local government has not exceeded the amount eligible to be assured by

the financial test according to subsection (f) of this regulation;

(B) a copy of the local government's audited comprehensive annual financial report or other audited annual financial report for the latest completed fiscal year, including the report and opinion of the auditor, who shall be an independent certified public accountant; and

(C) a special report of independent certified public accountants that is based on applying agreed-upon procedures engaged in accordance with professional auditing standards and that identifies the procedures performed and states that the independent accountant has determined all of the following:

(i) The data used to calculate the financial test ratios in paragraphs (c)(2)(A), (c)(2)(B), and (c)(2)(C) of this regulation were derived from the audited annual financial statements for the most recently completed fiscal year, and the ratios calculated from this data equal or exceed the stated requirements.

(ii) The owner or operator satisfies the requirements of paragraphs (c)(5)(C) and (f)(1) of this regulation.

(iii) The annual financial report has been prepared on a basis of accounting required by paragraph (c)(3) of this regulation and is accompanied by an auditor's opinion satisfying the requirements of paragraph (c)(5)(D) of this regulation.

(2) The items required by paragraph (e)(1) of this regulation shall be placed in the facility operating record to fulfill the requirements of K.A.R. 28-29-108(q)(1)(G) and shall be filed with the department no later than the effective date for a new permit, and also annually before the end of the latest allowable day for filing the annual audited financial report with the Kansas department of administration, director of accounts and reports, without extension, according to the provisions of K.S.A. 75-1124, and amendments thereto.

(3) The local government owner or operator shall satisfy the requirements of the local government financial test at the close of each fiscal year. If the local government no longer meets the requirements of the financial test, it shall obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) within 90 days of discovering the failure or within 210 days following the close of the most recently completed fiscal year, whichever first occurs, and shall obtain approval from the department for its use.

(4) The local government owner or operator shall no longer be required to submit the items specified in paragraph (e)(1) of this regulation or otherwise comply with the requirements of this regulation if either of the following conditions occurs:

(A) The local government substitutes an alternate method or instrument of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains the department's approval for its use.

(B) The local government is released by the department from further obligation for closure, postclosure, corrective action, or any combination of these, at the permitted facility.

(5) Additional reports of financial condition may be required by the department from the local government at any time for evaluation. If the department evaluation results in a determination that the local government no longer meets the requirements of the local government financial test, the local government shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) within 90 days following notice to the local government from the department.

(f) Calculation of costs to be assured.

(1) The portion of closure, postclosure, and corrective action costs that an owner or operator may assure by the local government financial test shall be determined as follows:

(A) If the local government owner or operator does not assure other environmental obligations or guarantees by the financial test, it may assure closure, postclosure, and corrective action costs for the permitted facility up to an amount equaling 43 percent of total annual revenues.

(B) If the local government owner or operator assures other environmental obligations or guarantees in any jurisdiction by the financial test in addition to the closure, postclosure, and corrective action costs of the permitted facility, it shall add the current cost estimates of the additional obligations or guarantees to the closure, postclosure, and corrective action costs of the permitted facility, and the combined environmental obligations assured shall not exceed 43 percent of total annual revenues.

(2) The local government owner or operator shall provide alternate financial assurance as specified in K.A.R. 28-29-2101(b) for any environmental obligations or guarantees in excess of 43 percent of total annual revenues.

(g) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by

K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2111. Financial assurance provided by a local government guarantee. (a) Local government guarantee. Each owner or operator of a municipal solid waste landfill may satisfy the requirements of K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both, by obtaining a written guarantee for closure, postclosure, or corrective action costs, or any combination of these, that is provided by a local government subdivision of the state of Kansas as specified in this regulation. The guarantor shall comply with the following:

(1) The requirements of the financial component for use of the local government financial test as specified in K.A.R. 28-29-2110(b);

(2) the public notice requirements of K.A.R. 28-29-2110(c);

(3) the record keeping and reporting requirements of K.A.R. 28-29-2110(d); and

(4) the terms of the guarantee.

(b) Form of the local government guarantee. The guarantor shall provide a written guarantee that is worded identically to the document provided by the department.

(c) Effective date of the guarantee. A guarantee of closure or postclosure, or both, for a new permit shall be in force before the permit is issued by the department. A guarantee for corrective action shall be in force within the times specified in K.A.R. 28-29-2102 (d).

(d) Record keeping and reporting requirements. Copies of the guarantee, with original signatures, shall be placed in the facility operating record of the owner or operator and filed with the department, with the documents specified for use by the owner or operator in K.A.R. 28-29-2110(d). The documentation shall be completed using the financial information and reports of the guarantor. These documents shall be updated and filed annually.

(e) Provisions of the guarantee. The terms of the guarantee shall stipulate the following:

(1) If the owner or operator fails to perform closure, postclosure, corrective action, or any combination of these, for the permitted facility covered by the guarantee when required to do so by the department or a court of competent jurisdiction, the guarantor shall perform either of the following:

(A) Perform or pay a third-party to perform closure, postclosure, corrective action, or any combination of these, as required by the department or any court of competent jurisdiction; or

(B) establish a fully funded trust fund as specified in K.A.R. 28-29-2103, in the name of the owner or operator, in the amount of the current cost estimate for closure, postclosure, corrective action, or any combination of these, whichever is greatest.

(2) The guarantee shall remain in effect unless the guarantor sends notice of cancellation by certified mail to both the owner or operator and the department. Cancellation shall not occur, however, during the 120 days beginning on the date by which both the owner or operator and the department have received the notice of cancellation, as evidenced by the return receipts.

(3) If the guarantee is canceled, the owner or operator shall, within 90 days following the date by which both the owner or operator and the department have received the cancellation notice, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department. If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor shall provide the alternate financial assurance in the name of the owner or operator within the next 30 days.

(f) Failure of the guarantee. If the local government guarantor no longer meets the requirements of K.A.R. 28-29-2110(b), the owner or operator shall, within 90 days, obtain alternate financial assurance as specified in K.A.R. 28-29-2101(b) and obtain approval from the department for its use. If the owner or operator fails to provide the alternate financial assurance within the 90-day period, the guarantor shall, within the next 30 days, provide the alternate financial assurance in the name of the owner or operator.

(g) Release of the guarantee. The owner or operator shall no longer be required to meet the requirements of this regulation if any of the following occurs:

(1) The owner or operator substitutes an alternative method of financial assurance as specified in K.A.R. 28-29-2101(b) and obtains written approval for its use from the department.

(2) The owner or operator is released by the department from further obligation for closure, postclosure, or both, at the permitted facility.

(3) The owner or operator completes the required corrective action and is released from fur-

ther obligation by the department or any court of competent jurisdiction.

(h) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2112. Financial assurance provided by use of ad valorem taxing authority. (a) Ad valorem taxing authority. Any owner or operator that is a local government subdivision of the state of Kansas and that is permitted to own or operate a solid waste disposal area or processing facility other than a municipal solid waste landfill may use its statutory authority to assess and collect ad valorem taxes to assure the closure, postclosure, or corrective action costs, or any combination of these, of the facility as required by K.A.R. 28-29-2101 or K.A.R. 28-29-2102, or both.

(b) Proof of ad valorem taxing authority. Whenever required to do so by the department, the local government owner or operator shall perform one of the following:

(1) Provide evidence of currently unused ad valorem taxing authority within any statutory tax limit or cap;

(2) provide analyses demonstrating that the cost of closure, postclosure, corrective action, or any combination of these, will be provided by ad valorem tax assessments within any statutory limit or cap in future budgets at the time that closure, postclosure, corrective action, or any combination of these, is required; or

(3) provide evidence demonstrating the existence and amount of a governmental or enterprise fund containing monies designated for use in providing closure, postclosure, corrective action, or any combination of these, for the permitted facility.

(c) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-3407, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2113. Financial assurance provided by a simplified financial instrument. (a) Simplified financial instrument.

(1) Any owner or operator of a permitted solid waste disposal area or processing facility with a current closure cost estimate equal to or less than $100,000, and with financial assurance from a single provider for that facility, may provide financial assurance in a simplified form of surety bond or letter of credit, instead of by use of any other financial instrument specified in K.A.R. 28-29-2101(b). The owner or operator of the facility may, with the department's approval, use an assigned certificate of deposit or assigned escrow account to provide financial assurance if the facility closure cost estimate is $25,000 or less.

(2) The simplified forms of financial instruments specified in this regulation shall not be used to provide financial assurance for the estimated cost of postclosure or corrective action.

(b) Form of the simplified financial instrument. The wording of the simplified surety bond or letter of credit shall be identical to the wording in the documents provided by the department.

(c) When a simplified financial instrument shall not be used. Whenever the estimate of closure cost exceeds $100,000 for any facility for which one of the simplified financial instruments specified in subsection (a) is in use, or whenever requested by the department, the owner or operator shall substitute, for that facility, one or more alternative methods of financial assurance as specified in K.A.R. 28-29-2101(b).

(d) The provisions of this regulation shall apply on and after February 24, 2000. (Authorized by K.S.A. 1998 Supp. 65-3406; implementing K.S.A. 1998 Supp. 65-340, as amended by L. 1999, Ch. 112, Sec. 1; effective Feb. 24, 2000.)

28-29-2201. Insurance for solid waste disposal areas and processing facilities. Except as provided in subsection (d), each owner or operator of a permitted solid waste disposal area or processing facility shall secure and maintain liability insurance for claims arising from injuries to other parties, including bodily injury and property damage. (a) Amount of liability coverage.

(1) The permit application shall be reviewed by the department to determine the amount of insurance coverage that the owner or operator shall secure and maintain for each disposal area or processing facility, based on the types of waste disposed and on the location, area, and geological characteristics of the site.

(2) Each owner or operator shall maintain insurance that shall provide coverage, including completed operations coverage, in the amount determined by the department but with commercial general liability limits not less than $1,000,000 for each occurrence and $1,000,000 for the annual aggregate.

(3) Each owner or operator shall maintain a policy that shall provide that the deductible amount be first paid by the insurer upon establishment of the legal liability of the insured, with full right of recovery from the insured. The deductible amount shall not exceed 2.5% of the policy limit for single occurrences.

(b) Insurance provider.

(1) Each owner or operator shall maintain a liability insurance policy that shall be issued by an insurance company authorized to do business in Kansas or through a licensed insurance agent operating under the authority of K.S.A. 40-246b, and amendments thereto.

(2) Each owner's or operator's liability insurance policy shall be subject to the insurer's policy provisions filed with and approved by the commissioner of insurance pursuant to K.S.A. 40-216 and amendments thereto, except as authorized by K.S.A. 40-246b, and amendments thereto.

(c) Proof of insurance.

(1) Each owner or operator shall furnish, at the following times, a certificate or memorandum of insurance to the department for the department's approval, showing specifically the coverage and limits together with the name of the insurance company and insurance agent:

(A) Before the department issues the permit and before any development work is started; and

(B) before each annual renewal of the permit during the active life of the area or facility.

(2) If any of the coverage set forth on the certificate or memorandum of insurance is reduced, canceled, terminated, or not renewed, the owner or operator or insurance company shall furnish the department with an appropriate notice of the action no fewer than 30 days before the effective date of the reduction, cancellation, termination, or nonrenewal.

(d) Governmental entities. Any owner or operator that is a governmental entity as defined in K.S.A. 75-6102, and amendments thereto, and is subject to provisions of the Kansas tort claims act, and amendments thereto, may provide to the department a statement or other evidence of its intention to fund liability judgements in the manner provided in K.S.A. 75-6113, and amendments thereto, in lieu of providing evidence of purchased insurance covering liability for accidental occurrences.

(e) Variances. Any owner or operator may request that the department evaluate the hazard or hazards involved and may request a variance, under K.A.R. 28-29-2, from the insurance method or specific insurance coverage amounts prescribed in this regulation if all the following conditions are met:

(1) The solid waste management activity is conducted solely on the premises where the wastes are generated.

(2) The owner or operator performs the waste management activity.

(3) The owner or operator is the owner of the property where the activity is conducted.

(4) The owner or operator is able to demonstrate other financial responsibility satisfactory to the department. This demonstration shall be made by adding the required liability coverage amount to the costs of closure and postclosure care assured by the corporate financial test method as specified in K.A.R. 28-29-2108, or the corporate guarantee method as specified in K.A.R. 28-29-2109. (Authorized by K.S.A. 2001 Supp. 65-3406; implementing K.S.A. 2001 Supp. 65-3407; effective March 22, 2002.)

Article 30.—WATER WELL CONTRACTOR'S LICENSE; WATER WELL CONSTRUCTION AND ABANDONMENT

28-30-1. (Authorized by K.S.A. 1979 Supp. 82a-1202, 82a-1205; effective, E-74-34, July 2, 1974; modified, L. 1975, ch. 481, May 1, 1975; revoked May 1, 1980.)

28-30-2. Definitions. (a) "License" means a document issued by the Kansas department of health and environment to qualified persons making application therefore, authorizing such persons to engage in the business of water well contracting.

(b) "Department" means the Kansas department of health and environment.

(c) "Abandoned water well" means a water well determined by the department to be a well:

(1) whose use has been permanently discontinued;

(2) in which pumping equipment has been permanently removed;

(3) which is either in such a state of disrepair that it cannot be used to supply water, or has the potential for transmitting surface contaminants into the aquifer, or both;

(4) which poses potential health and safety hazards; or

28-23-20 through 28-23-24. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-26 through 28-23-32. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-34 through 28-23-36. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-41. (Authorized by K.S.A. 65-663, K.S.A. 1968 Supp. 65-673; effective Jan. 1, 1969; revoked June 4, 2010.)

28-23-42 through 28-23-55. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-70 and 28-23-71. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-73. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-75. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

28-23-78 through 28-23-80. (Authorized by K.S.A. 1965 Supp. 65-626; effective Jan. 1, 1966; revoked June 4, 2010.)

Article 29.—SOLID WASTE MANAGEMENT

28-29-1a. Modification of obsolete references and text. The following modifications shall be made to article 29:

(a) In K.A.R. 28-29-23(t), "K.A.R. 28-31-3" shall be replaced with "K.A.R. 28-31-261."

(b) In K.A.R. 28-29-23a(c)(8), the phrase "K.A.R. 28-31-3 and K.A.R. 28-29-4" shall be replaced with "K.A.R. 28-31-261."

(c) In K.A.R. 28-29-27(g)(3), "K.A.R. 28-31-9" shall be replaced with "K.A.R. 28-31-270."

(d) In K.A.R. 28-29-102, the following modifications shall be made:

(1) In paragraph (l)(2)(A), "K.A.R. 28-15-11" shall be replaced with "K.A.R. 28-16-28b(fff)."

(2) In paragraph (l)(2)(B), "K.A.R. 28-15-11" shall be replaced with "K.S.A. 65-162a, and amendments thereto."

(e) In K.A.R. 28-29-108, the following modifications shall be made:

(1) In subsection (a), the phrase "K.A.R. 28-31-3 and K.A.R. 28-31-4" shall be replaced with "K.A.R. 28-31-261."

(2) In paragraph (h)(1), "K.A.R. 28-19-47" shall be replaced with "K.A.R. 28-19-647."

(f) In K.A.R. 28-29-109(b)(6) and (7)(B)(i), "K.A.R. 28-31-3" shall be replaced with "K.A.R. 28-31-261."

(g) In K.A.R. 28-29-300(a)(5), "K.A.R. 28-31-4" shall be replaced with "K.A.R. 28-31-261."

(h) In K.A.R. 28-29-1100, the following modifications shall be made:

(1) In paragraph (b)(1), "K.A.R. 28-31-4 (b)" shall be replaced with "K.A.R. 28-31-261."

(2) In paragraph (b)(3), the following modifications shall be made:

(A) " 'Small quantity generator' " shall be replaced with " 'Conditionally exempt small quantity generator.' "

(B) "K.A.R. 28-31-2" shall be replaced with "K.A.R. 28-31-260a."

(3) In paragraph (b)(4), the phrase "defined by the United States department of transportation and adopted by reference in K.A.R. 28-31-4 (e)" shall be replaced with "as listed in 49 CFR 173.2, as in effect on October 1, 2009, which is hereby adopted by reference."

(4) In subsection (c), each occurrence of the term "K.A.R. 28-31-16" shall be replaced with "K.A.R. 28-31-279 and K.A.R. 28-31-279a."

(5) In subsection (d), "[s]mall quantity generator" shall be replaced with "Conditionally exempt small quantity generator."

(6) In subsections (d) and (e), each occurrence of the term "SQG" shall be replaced with "CESQG."

(i) In K.A.R. 28-29-1102, the following modifications shall be made:

(1) Paragraphs (b)(2)(C), (b)(2)(C)(i), and (b)(2)(C)(ii) shall be replaced with the following text: "All HHW that is transferred for treatment, storage, or disposal shall be manifested as hazardous waste. All applicable hazardous waste codes for each waste shall be listed on the manifest, using all available information. HHW facilities shall not be required to submit samples for laboratory testing in order to determine hazardous waste codes."

(2) In paragraph (b)(2)(D), "K.A.R. 28-31-14" shall be replaced with "K.A.R. 28-31-268."

(3) Paragraph (b)(2)(E) shall be replaced with the following text: "All HHW that is transferred for treatment, storage, or disposal shall be prepared for transportation off-site as hazardous waste."

(4) In paragraph (b)(2)(F)(i), "K.A.R. 28-31-15" shall be replaced with "K.A.R. 28-31-273."

(j) In K.A.R. 28-29-1103(c), the phrase "meeting the USDOT manufacturing and testing specifications for transportation of hazardous materials, as adopted by reference in K.A.R. 28-31-4 (e)" shall be replaced with "that are compatible with the waste."

(k) In K.A.R. 28-29-1107(a)(2)(D), "small quantity generator" shall be replaced with "conditionally exempt small quantity generator." (Authorized by and implementing K.S.A. 65-3406; effective Nov. 28, 2011.)

28-29-109. Special waste. (a) Disposal of special waste. Any person may dispose of special waste, as defined in K.A.R. 28-29-3, if all of the following conditions are met.

(1) The person disposes of the special waste at a permitted municipal solid waste landfill (MSWLF).

(2) A special waste disposal authorization for the special waste has been issued by the department in accordance with subsections (b) and (c).

(3) All the conditions of subsections (d) through (g) are met.

(b) Request for a special waste disposal authorization. Each person requesting a special waste disposal authorization shall provide the following information to the department:

(1) A description of the waste, including the following information:

(A) The type of waste;

(B) the process that produced the waste;

(C) the physical characteristics of the waste;

(D) the quantity of waste to be disposed of; and

(E) the location of the waste generation site, if different from the generator's address;

(2) the following information for the generator of the waste:

(A) The contact person's name;

(B) the contact person's address;

(C) the contact person's telephone number;

(D) the contact person's electronic mail address, if there is one; and

(E) the name of the business, if the generator is a business;

(3) the following information for the person requesting the special waste disposal authorization:

(A) The contact person's name;

(B) the contact person's address;

(C) the contact person's telephone number; and

(D) the contact person's electronic mail address, if there is one; and

(E) the name of the business, if the request is being made on behalf of a business;

(4) the name and address of each solid waste transfer station proposed for transfer of the waste;

(5) the name and address of the MSWLF proposed for disposal of the waste;

(6) a statement, signed by the generator of the waste or an agent of the generator, that the waste is not a listed hazardous waste and is not a waste that exhibits the characteristics of a hazardous waste specified in K.A.R. 28-31-261, based on knowledge of the process generating the waste, laboratory analyses, or both; and

(7) each laboratory analysis that has been performed to determine if the waste is a listed hazardous waste or is a waste that exhibits the characteristics of a hazardous waste. The person requesting a special waste disposal authorization shall ensure that the following requirements are met:

(A) Each analysis shall be performed and reported by a laboratory that has departmental certification, if this certification is available, for that analysis;

(B) each analytical laboratory report shall include the following:

(i) Each analysis required to make a determination of hazardous waste characteristics as specified in K.A.R. 28-31-261;

(ii) all additional analyses specified by the department;

(iii) quality control data; and

(iv) a copy of the chain of custody;

(C) the generator shall provide a signed statement for each analytical laboratory report stating that the analytical results are representative of the waste; and

(D) if the waste is an unused or spilled product and the waste has not been combined with any substance other than an absorbent, the generator may submit a material safety data sheet for the waste in lieu of laboratory analyses.

(c) Issuance of special waste disposal authorizations.

(1) Not later than 10 working days after the department receives a request for a special waste disposal authorization, the person making the request shall be notified by the department of one of the following determinations:

(A) The request for a special waste disposal authorization is not complete.

(B) The waste does not require a special waste disposal authorization for disposal in an MSWLF.

(C) The waste is a special waste, and the request for a special waste disposal authorization is approved.

Appendix D

Applicable Bureau of Waste Management Policies

Kansas Department of Health and Environment
Bureau of Waste Management Policy 98-05

related to

Requirements for Solid Waste Facility Permit Actions

August 19, 1998

Background

K.A.R. 28-29-6a, Public notice of permit actions, public comment period, and public hearings, requires the department to give public notice when a municipal solid waste landfill (MSWLF) permit action is proposed under K.A.R. 28-29-6, Permits and engineering plans. The public notice is required for draft permits and for significant modifications to permits.

Purpose

This Bureau of Waste Management policy extends the public notice requirement to include the following solid waste permits: industrial landfill, construction/demolition (CD) landfill, and solid waste processing facility, including transfer station, composting facility, and household hazardous waste facility.

Public Notice Requirements

Any proposed solid waste permit at a new site would require a public notice. A change in solid waste management at an existing site would involve the concept of significant modification which is referred to in K.A.R. 28-29-6a. A significant modification is considered to be a 10% or greater increase in volume or capacity of the permitted disposal area or any areal increase in permitted property. The addition of any solid waste activity at a MSWLF that is closed and is in post-closure would be a significant modification.

The following would not be considered significant modifications to a landfill that was closed to MSW but has had continued solid waste activities: the addition of solid waste management activities (a transfer station, compost area, scrap metals area), or the addition of a new disposal cell that is in an area that was previously permitted for MSW.

William L Bider

William L. Bider
Director, Bureau of Waste Management

8-20-98

Date

Kansas Department of Health and Environment

Bureau of Waste Management Policy 05-01

related to

Notifying Agencies about Proposed New Solid Waste Facilities and Expansions

effective May 31, 2005
revised December 29, 2005
revised April 15, 2008

Purpose

This Bureau of Waste Management policy is intended to clarify the requirements for applicants seeking solid waste disposal area and/or processing facility permits to notify other government agencies about proposed facilities and to request information from those agencies relative to the site characteristics.

Background

Kansas Statutes Annotated (K.S.A.) 65-3406(a) authorizes and directs the Kansas Department of Health and Environment (KDHE) to:

> (1) Adopt such rules and regulations, standards and procedures relative to solid waste management as necessary to protect public health and environment, prevent public nuisances and enable the secretary to carry out the purposes and provisions of this act.
>
> ...and…
>
> (4) Cooperate with appropriate federal, state, interstate and local units of government and with appropriate private organizations in carrying out duties under this act.

Kansas Administrative Regulations (K.A.R.) 28-29-23(d) stipulates in part that the:

> Location of all solid waste disposal areas and solid waste processing facilities shall conform to applicable state laws, and county or city zoning regulations and ordinances.

Specific location restrictions in K.S.A. 65-3407(l) and K.A.R. 28-29-23(d), -102, and -302 identify a number of factors to be used by KDHE in determining the appropriateness of a proposed solid waste facility location. Most of those factors are under the primary authority of other government agencies (e.g., flood plains, wetlands, critical habitat, etc.) and/or are an area of knowledge in which other government agencies specialize (e.g., geologic conditions).

Furthermore, other factors that are not specifically identified in statutes and regulations may be important for KDHE to consider in evaluating proposed solid waste facility locations. Examples include active/abandoned gas/oil wells and appurtenances, water supply recharge areas, and other sensitive/protected areas.

In order to learn whether there are potential concerns such as these it is essential for KDHE to receive input from other agencies when new or expanded solid waste facilities are proposed. It is standard practice for this type of "due diligence" research to be performed prior to most types of municipal, residential, commercial, and industrial land development.

Applicability
The agency notification requirements apply to "designated applicants", defined as persons applying for the following:

- a permit for a new solid waste facility
- a significant permit modification (see BWM Policy 98-05)

The notification requirements may be reduced for solid waste processing facilities located at existing facilities or buildings, or in previously disturbed or developed urban areas. In those situations, the Bureau of Waste Management will determine which agencies must be notified by the applicant based on site characteristics (e.g. if wetlands, flood plain, possible historically significant area, etc. appear to be involved, or if the need for agency notification is uncertain).

Action
Based on the authority and justification described above, the Bureau of Waste Management requires every designated applicant to submit evidence that other government agencies have been notified and to submit the responses received from the agencies. To facilitate this process, KDHE recommends that all applicants comply with the specific guidelines that follow:

1. Each designated applicant should, as part of preparing an application: notify the following agencies in writing about the proposed facility; provide a location map and site layout map; and request comments from the agencies as to whether they are aware of any concerns with the proposed facility location, within the scope of their areas of authority and knowledge.

    - Kansas Biological Survey
    - Kansas Corporation Commission
    - Kansas Department of Agriculture - Division of Water Resources
    - Kansas Department of Wildlife and Parks
    - Kansas Geological Survey
    - Kansas State Conservation Commission
    - Kansas State Historical Society
    - Kansas Water Office
    - U.S. Army Corps of Engineers
    - U.S. Fish and Wildlife Service

2. If the applicant is aware of other agencies that would be appropriate to notify with regard to a proposed facility location, then the applicant should submit a similar notification and request for comments to those agencies as well. If the Bureau determines that agencies other than those listed above would have any authority, interest, or knowledge pertaining to a proposed facility location, then the Bureau may require the applicant to submit a notification and request for comments from those agencies at any time during the application review process.

3. Applicants should not request the agencies to "approve" proposed solid waste facilities; only KDHE has the authority to permit solid waste facilities. The requests should be limited to seeking pertinent information that the agencies may have with regard to proposed facility locations. Applicants should not specify what aspects of a proposed facility location the agencies should address; for example, applicants should not indicate an expectation for the Kansas Geological Survey to make a determination on whether a particular location contains "unstable areas". Applicants should not cite solid waste management statutes or regulations in the notifications and request for comments.

4. Suggested wording for notification letters to agencies is provided below. The actual wording of these letters may vary, but should be similar to the suggested wording.

> *Dear [name of agency] staff:*
>
> *We have been retained by [name of landfill applicant] to prepare an application for a landfill permit. One of the requirements is to check with several agencies to determine if they have any information about the proposed site.*
>
> *The proposed [type of] landfill would be located on XX acres in the [quadrant] quarter of [section, township, range] in [county name] county. A location map and preliminary site layout plan are attached. We request a response from your agency indicating any issues you may be aware of regarding this proposed land use.*
>
> *Thank you for your consideration in this matter. If you have any questions about this request, please contact me at [phone number].*
>
> *Sincerely,*
>
> *[signature]*

Applicants shall submit copies of the notifications and copies of the agency responses to the Bureau with solid waste facility applications. The Bureau will also allow applicants to submit copies of responses after an application has been submitted, if the responses were not available at the time the application was submitted. However, the Bureau may wait to act on applications if they are not "complete", e.g. if agency responses have not been submitted.

William L Bider

April 10, 2008

William L. Bider
Director, Bureau of Waste Management

Kansas Department of Health and Environment
Bureau of Waste Management Policy 2014-P1

related to

Permit Renewal and Financial Assurance Requirements for Landfills Operating Postclosure Environmental Monitoring Systems

Purpose
This policy clarifies certain financial and reporting requirements that apply to the owners and operators of solid waste landfills that are operating environmental monitoring systems during the postclosure care period.

Background
The owner or operator (O/O) of each solid waste landfill is responsible for long-term care of the site for at least 30 years after the facility closes. The Kansas Department Health and Environment (KDHE) may extend the postclosure care (PCC) period beyond 30 years if necessary to protect public health and safety or the environment. Bureau of Waste Management (BWM) Policy 2014- P2 provides for the possibility of reducing and/or terminating some PCC activities before the end of the standard 30-year PCC period. The policy also states the criteria that must be met to reduce or terminate particular PCC activities, whether before or after the end of the 30-year PCC period.

Postclosure care activities for all landfill O/O include inspections and maintenance of the final cover system. The O/O of certain landfills are required to operate and maintain postclosure environmental monitoring systems, including: groundwater monitoring; leachate collection; landfill gas control; and other site-specific systems. BWM staff must provide regulatory oversight during the postclosure period, including periodic inspections of the final cover system and more intensive efforts when environmental monitoring continues after closure. Those extra efforts include the review of groundwater, leachate, and gas monitoring reports, inspection of monitoring systems, and reviews of postclosure cost estimates.

Postclosure permit renewal and financial assurance requirements for landfills include the following:

- The O/O of each landfill that is required to operate and maintain postclosure environmental monitoring systems must maintain postclosure financial assurance [KAR 28-29-2101(j)].
- The O/O of each landfill must maintain liability insurance during the postclosure care period in an amount determined by KDHE [KSA 65-3407(h)(3)]. For landfills that are not required to operate postclosure environmental monitoring systems, that amount is typically $0.
- The O/O of each landfill that is operating under a permit issued by KDHE must pay the annual permit renewal fee [KAR 28-29-84]. This includes landfills that are operating postclosure environmental monitoring systems.

Action

Permit Renewal

For each landfill with environmental monitoring systems, the O/O must submit the following items to BWM each year for the duration of the postclosure care period:

- The permit renewal fee;
- A current postclosure cost estimate worksheet;
- A demonstration of financial assurance as required by KAR 28-29-2101 through 28-29-2113;
- A current certificate of liability insurance in accordance with KAR 28-29-2201; and
- An environmental monitoring report.

These items must be submitted to BWM before the annual permit renewal date, which will be the same date that was used for annual permit renewal during the active life of the facility.

The permit renewal fee, financial assurance, and other renewal requirements do not apply to the following landfills unless environmental monitoring becomes a requirement due to emergence of any threats to public health or safety or the environment:

- Landfills with no environmental monitoring activities, except the maintenance and repair of the final cover and/or gas monitoring in structures; and
- Municipal solid waste landfills that closed before the dates listed in KAR 28-29-100, in accordance with their consent agreements.

Calculation of Financial Assurance

- Financial assurance may be determined separately for each unit within the landfill.
- Financial assurance will be determined separately for each postclosure care activity being performed at the landfill or unit.
- If the O/O demonstrates to KDHE that a postclosure care activity can be conducted at a reduced level, the financial assurance for that activity may be correspondingly reduced.
- The O/O must continue to maintain 30 years of financial assurance (rolling 30) for each postclosure care activity until the O/O demonstrates to KDHE that the activity can be terminated in fewer than 30 years.
  - If the O/O can demonstrate that a postclosure care activity can be terminated in fewer than 30 years, the financial assurance for that activity may be based on the predicted termination date for that activity.
  - The predicted termination date must be adjusted, if necessary, based on periodic review and evaluation of data.
- The predicted termination date may be determined before or after closure of the landfill or unit.

This policy will remain in effect until it is revoked or until it is rendered obsolete by future amendments to solid waste law or regulations.

William L Bider

William L. Bider
Director, Bureau of Waste Management

5-1-14

Date

Appendix E

Bureau of Waste Management Penalty Matrix

SOLID WASTE PENALTY MATRIX
Bureau of Waste Management

Prepared by the
Compliance and Enforcement Unit
Revised March 17, 2014

Kansas Statutes Annotated (K.S.A.) 65-3419 authorizes the Director of the Division Environment to impose a civil penalty not to exceed $5,000 per day per violation for each violation of K.S.A. 65-3409 and amendments thereto. This penalty matrix has been compiled to provide guidance to the KDHE staff when assessing monetary penalties. The matrix provides penalty ranges; however, upon sufficient justification KDHE may impose the maximum penalty allowed by the statutes or a lesser amount than shown in any penalty range. KDHE may exercise discretion to reduce the penalty amount set by the penalty matrix for multiple occurrences of the same violation if all available facts demonstrate the potential that the cited violation(s) will cause a threat to public health or the environment is minimal relative to the deterrent effect of the penalty; *and* the incidents that support the violation are minor or few in number. This penalty matrix is not intended to include all possible violations or maximum number of offenses that may occur. The penalty amounts may be adjusted as necessary to ensure that each penalty reflects an actual and substantial economic deterrent to the violation and the economic benefit realized through the violation for which it is assessed.

Category A - Unpermitted individuals or businesses not related to solid waste processing, transportation, or disposal industries that have not been previously penalized.

Category B - Permitted facilities as well as unpermitted facilities related to solid waste processing, transportation, or disposal industries that have not been previously penalized. Tire Retailers cited for tire-related violations shall be considered in Category B or C.

Category C - Permitted facilities as well as unpermitted facilities related to solid waste processing, transportation, or disposal industries not meeting one of the other two criteria, or whose violations are severe enough to warrant higher penalties.

PENALTY MATRIX NUMBER	SOLID WASTE VIOLATIONS	KDHE REGULATORY CITATION	CATEGORY
1	Unlawful acts including: a. Illegal disposal (open dumping); b. Construction, alteration or operation of a solid waste processing or disposal facility or act as a waste tire transporter or mobile waste tire processor (KSA 65-3424) without a permit; c. Burn solid waste in violation of the provisions of the Kansas Air Quality act; d. Store, collect, transport, process, treat or dispose of solid waste contrary to the rules and regulations, standards or orders of the secretary or in such a manner as to create a public nuisance; e. Refuse or hinder an inspection; f. Violations of K.S.A. 65-3424a and 65-3424b or K.S.A. 65-3424i and amendments thereto.	K.S.A. 65-3409	Use appropriate attachment for guidance or use the following range: Category A $400 to $2,500
2	Failure to comply with the solid waste storage requirements.	K.A.R. 28-29-21	Category A $200 to $500

3	Failure to comply with the incinerator and composting requirements (not pertaining to composting or incinerating as a business).	K.A.R. 28-29-25	Category A $200 to $500
4	Failure to comply with the medical services waste requirements.	K.A.R. 28-29-27	Category A $200 to $500
5	Failure to comply with the standard for Waste Tire Management.	K.A.R. 28-29-28 through 33	Category A $200 to $500
6	Failure to comply with the requirements for the solid waste management committee or plans.	K.A.R. 28-29-76 to 28-29-82	Category A $200 to $500
7	Unlawful acts including: a. Illegal disposal (open dumping); b. Construction, alteration or operation of a solid waste processing or disposal facility or act as a waste tire transporter or mobile waste tire processor (KSA 65-3424) without a permit; c. Burn solid waste in violation of the provisions of the Kansas Air Quality act; d. Store, collect, transport, process, treat or dispose of solid waste contrary to the rules and regulations, standards or orders of the secretary or in such a manner as to create a public nuisance; e. Refuse or hinder an inspection, sampling, and the examination or copying of records related to the purpose of this act by an agent or employee of the secretary; f. Violations of K.S.A. 65-3424a and 65-3424b or K.S.A. 65-3424i and amendments thereto; g. Dividing a permitted solid waste disposal area into two or more sections; h. Violating any condition of a permit issued under K.S.A. 65-3407 or K.S.A. 65-3424b and amendments thereto.	K.S.A. 65-3409	Use appropriate attachment for guidance or use the following range: Category B $1,000 to $2,500 Category C $2,000 to $5,000
8	Failure to comply with requirements for permits and engineering plans; public notice of permit actions, public comment period, and public hearings; conditions of permits; modifying permits; suspension of permits; denial or revocation of permits; notification of closure, closure plans, and long term care; monitoring requirements; and restrictive covenants and easements.	K.A.R. 28-29-6 K.A.R. 28-29-6a K.A.R. 28-29-7 K.A.R. 28-29-8 K.A.R. 28-29-9 K.A.R. 28-29-10 K.A.R. 28-29-12 K.A.R. 28-29-19 K.A.R. 28-29-20	Category B $500 to $2,500 Category C $1,000 to $5,000
9	Failure to comply with the standards for collection and transportation of solid waste.	K.A.R. 28-29-22	Category B $500 to $2,500 Category C $1,000 to $5,000
10	Failure to comply with any solid waste standard or requirement not otherwise specified in this penalty matrix.		Category B $500 to $2,500 Category C $1,000 to $5,000

11	Failure to design facility according to department requirements or to abide by location restriction requirements.	K.A.R. 28-29-23(c) K.A.R. 28-29-23a(b) K.A.R. 28-29-25a(a) K.A.R. 28-29-25b(a) K.A.R. 28-29-25c(a) K.A.R. 28-29-25d(a) K.A.R. 28-29-25e(a) K.A.R. 28-29-25f(a) K.A.R. 28-29-102 K.A.R. 28-29-104(a) K.A.R. 28-29-304	Category B $1,500 to $2,500 Category C $2,500 to $5,000
12	Failure to comply with liner standards and liner construction requirements.	K.A.R. 28-29-104(e) K.A.R. 28-29-104(f)	Category B $1,500 to $2,500 Category C $2,500 to $5,000
13	Accepting or offering special waste for disposal without prior department approval.	K.A.R. 28-29-23a(c)(2) K.A.R. 28-29-23(s) K.A.R. 28-29-108(r)(13)	Category B $500 to $2,500 Category C $1,000 to $5,000
14	Failure to maintain a log and map of special wastes that includes the source and quantity of waste and the disposal location.	K.A.R. 28-29-23(r) K.A.R. 28-29-108(r)(12)	Category B $500 to $2,500 Category C $1,000 to $5,000
15	Failure to construct or maintain access roads for all-weather accessibility and negotiation at all times.	K.A.R. 28-29-23(e) K.A.R. 28-29-108(r)(10) K.A.R. 28-29-304(c)	Category B $500 to $2,500 Category C $1,000 to $5,000

16	Failure to prepare, maintain, or submit required records, plans (including operating plans, daily logs, tonnage reports, training records, permits, annual reports, contingency plans, financial assurance, cost estimates, small landfill exemption demonstrations, etc), registrations, fees, or permit applications or renewals.	K.A.R. 28-29-23(f) K.A.R. 28-29-23a(c)(18) K.A.R. 28-29-23a(c)(19) K.A.R. 28-29-23a(c)(20) K.A.R. 28-29-23a(c)(21)(B) K.A.R. 28-29-25a(d) K.A.R. 28-29-25b(d) K.A.R. 28-29-25c(d) K.A.R. 28-29-25c(e) K.A.R. 28-29-25d(d) K.A.R. 28-29-25d(e) K.A.R. 28-29-25e(d) K.A.R. 28-29-25e(e) K.A.R. 28-29-25f(d) K.A.R. 28-29-25f(e) K.A.R. 28-29-30 K.A.R. 28-29-31a(a) K.A.R. 28-29-31a(c) K.A.R. 28-29-32 K.A.R. 28-29-33(b) K.A.R. 28-29-108(q) K.A.R. 28-29-308(i) K.A.R. 28-29-308(j) K.A.R. 28-29-308(p) K.A.R. 28-29-308(q)	Category B $1,000 to $2,500 Category C $2,000 to $5,000 (Plus any required fees, as applicable)
17	Failure by a transfer station to develop and implement procedures for preventing the receipt of unauthorized waste.	K.A.R. 28-29-23a(c)(8)	Category B $500 to $2,500 Category C $1,000 to $5,000
18	Failure by any operator to comply with applicable provisions of K.S.A. 65-3001 et seq., regulations pertaining to those statutes, or any local air quality regulation.	K.A.R. 28-29-23(g) K.A.R. 28-29-308(b)	Category B $500 to $2,500 Category C $1,000 to $5,000
19	Failure to provide two-way communication.	K.A.R. 28-29-23(h) K.A.R. 28-29-308(n)	Category B $500 to $2,500 Category C $1,000 to $5,000
20	Failure to make arrangements with fire protection services or to make alternate arrangements if public services are not available. Also, failure to initiate or continue appropriate fire fighting methods until all smoldering, smoking, and burning ceases, or to cover and re-grade all disrupted finished grades or completed surfaces upon the completion of fire fighting activities.	K.A.R. 28-29-23(i) K.A.R. 28-29-108(r)(6) K.A.R. 28-29-308(c)	Category B $500 to $2,500 Category C $1,000 to $5,000
21	Failure by a transfer station to maintain required fire protection equipment.	K.A.R. 28-29-23a(c)(17)	Category B $500 to $2,500 Category C $1,000 to $5,000

22	Failure to limit access to hours when an attendant or operating personnel are at the site, or to have an attendant on duty whenever the facility is open to the public, or to limit access to prevent unauthorized dumping.	K.A.R. 28-29-23(j) K.A.R. 28-29-23a(c)(5) K.A.R. 28-29-23a(c)(7) K.A.R. 28-29-25a(a)(2)(B) K.A.R. 28-29-25b(a)(2)(B) K.A.R. 28-29-25c(a)(2)(B) K.A.R. 28-29-25c(b)(4) K.A.R. 28-29-25d(a)(2)(B) K.A.R. 28-29-25d(b)(7) K.A.R. 28-29-25e(a)(2)(B) K.A.R. 28-29-25e(b)(6) K.A.R. 28-29-25f(a)(2)(B) K.A.R. 28-29-25f(b)(6) K.A.R. 28-29-31a(b)(1) K.A.R. 28-29-31a(b)(3) K.A.R. 28-29-108(i)(1) K.A.R. 28-29-108(r)(11) K.A.R. 28-29-308(e)	Category B $500 to $2,500 Category C $1,000 to $5,000
23	Failure to post hours of operation, and other required information at the entrance to the area or facility.	K.A.R. 28-29-23(k) K.A.R. 28-29-23a(c)(4) K.A.R. 28-29-25a(a)(2)(A) K.A.R. 28-29-25b(a)(2)(A) K.A.R. 28-29-25c(a)(2)(A) K.A.R. 28-29-25d(a)(2)(A) K.A.R. 28-29-25e(a)(2)(A) K.A.R. 28-29-25f(a)(2)(A) K.A.R. 28-29-31a(b)(2) K.A.R. 28-29-108(i)(2) K.A.R. 28-29-304(b)	Category B $500 to $2,500 Category C $1,000 to $5,000
24	Failure to follow salvaging requirements, or failure to prevent scavenging.	K.A.R. 28-29-23(l) K.A.R. 28-29-108(p) K.A.R. 28-29-308(l) K.A.R. 28-29-308(m)	Category B $500 to $2,500 Category C $1,000 to $5,000
25	Failure to develop, provide or follow the approved operational safety program or training program.	K.A.R. 28-29-23(m) K.A.R. 28-29-23a(c)(21)(A) K.A.R. 28-29-108(r)(9) K.A.R. 28-29-308(o)	Category B $1,000 to $2,500 Category C $2,000 to $5,000

26	Failure to operate in a manner that will prevent the harborage of breeding of insects or rodents, or to promptly implement supplemental disease vector control measures when necessary.	K.A.R. 28-29-23(n) K.A.R. 28-29-23a(c)(10) K.A.R. 28-29-25a(b)(2) K.A.R. 28-29-25b(b)(2) K.A.R. 28-29-25c(b)(2) K.A.R. 28-29-25d(b)(2) K.A.R. 28-29-25e(b)(2) K.A.R. 28-29-25f(b)(2) K.A.R. 28-29-108(d)	Category B $500 to $2,500 Category C $1,000 to $5,000
27	Failure to control odor, noise, and particulates, including dust and litter, and have other controls in place or meet other operating standards as required by regulations.	K.A.R. 28-29-23(o) K.A.R. 28-29-23a(c)(9) K.A.R. 28-29-23a(c)(14) K.A.R. 28-29-25a(b) K.A.R. 28-29-25b(b) K.A.R. 28-29-25c(b) K.A.R. 28-29-25d(b) K.A.R. 28-29-25e(b) K.A.R. 28-29-25f(b) K.A.R. 28-29-108(r)(4) K.A.R. 28-29-108(r)(5) K.A.R. 28-29-108(r)(7) K.A.R. 28-29-108(r)(8) K.A.R. 28-29-308(a)	Category B $500 to $2,500 Category C $1,000 to $5,000
28	Failure to implement a gas monitoring program if required by regulation, or to prevent the off-site migration of explosive gasses generated by the decomposition of solid waste, allow the exceedance of 25% of the LEL in on-site structures or at the facility's property line, or to notify the department as required by regulation.	K.A.R. 28-29-23(p) K.A.R. 28-29-108(e)	Category B $1,000 to $2,500 Category C $2,000 to $5,000
29	Failure to meet the gas management standards or the standards for gas processing and disposal systems.	K.A.R. 28-29-108(f)	Category B $500 to $2,500 Category C $1,000 to $5,000
30	Failure to evaluate or meet the requirements of the gas processing and disposal systems.	K.A.R. 28-29-108(g)	Category B $500 to $2,500 Category C $1,000 to $5,000
31	Failure by an MSWLF to meet the air criteria.	K.A.R. 28-29-108(h)	Category B $500 to $2,500 Category C $1,000 to $5,000

32	Failure to prevent nonpoint source pollution discharges, discharges of fill or dredge material, prevent pollution or degradation of groundwater with the potential or actual use as drinking water, or to other specified quality, or the disposal of solid waste into unconfined waters, or the discharge of pollutants into the waters of the state.	K.A.R. 28-29-23(q) K.A.R. 28-29-25a(a)(1)(B) K.A.R. 28-29-25b(a)(1)(B) K.A.R. 28-29-25c(a)(1)(B) K.A.R. 28-29-25d(a)(1)(B) K.A.R. 28-29-25e(a)(1)(B) K.A.R. 28-29-25f(a)(1)(B) K.A.R. 28-29-108(j)(4) K.A.R. 28-29-108(j)(5) K.A.R. 28-29-308(d)(4)	Category B $1,500 to $2,500 Category C $2,500 to $5,000
33	Failure to: a. have appropriate stormwater/surface water controls in place as required by regulation, including the proper grading to prevent ponding of water, maintaining ditches and berms to correctly direct stormwater and to minimize and prevent erosion, and to repair erosion channels as necessary; b. provide run-on or run-off controls.	K.A.R. 28-29-25a(a)(1)(A) K.A.R. 28-29-25b(a)(1)(A) K.A.R. 28-29-25b(a)(1)(C) K.A.R. 28-29-25c(a)(1)(A) K.A.R. 28-29-25c(a)(1)(D) K.A.R. 28-29-25d(a)(1)(A) K.A.R. 28-29-25d(a)(1)(D) K.A.R. 28-29-25e(a)(1)(A) K.A.R. 28-29-25e(a)(1)(D) K.A.R. 28-29-25f(a)(1)(A) K.A.R. 28-29-25f(a)(1)(D) K.A.R. 28-29-108(j)(1) K.A.R. 28-29-108(j)(2) K.A.R. 28-29-108(j)(3) K.A.R. 28-29-308(d)(1) K.A.R. 28-29-308(d)(2) K.A.R. 28-29-308(d)(3)	Category B $500 to $2,500 Category C $1,000 to $5,000
34	Failure to appropriately clean a transfer station.	K.A.R. 28-29-23a(c)(11) K.A.R. 28-29-23a(c)(13)	Category B $500 to $2,500 Category C $1,000 to $5,000
35	Failure to properly manage drainage from the wet cleaning of a transfer station.	K.A.R. 28-29-23a(c)(12)	Category B $500 to $2,500 Category C $1,000 to $5,000
36	Failure to load solid waste into a transfer vehicle within one day of receiving it at a transfer station.	K.A.R. 28-29-23a(c)(15)	Category B $500 to $2,500 Category C $1,000 to $5,000
37	Failure to remove transfer vehicle(s) from the transfer station site within 48 hours after being filled to capacity or within 7 days of being partially filled.	K.A.R. 28-29-23a(c)(16)	Category B $500 to $2,500 Category C $1,000 to $5,000
38	Unauthorized waste in a construction and demolition landfill. Failure to comply with the waste screening requirements.	K.A.R. 28-29-308(f)	Category B $500 to $2,500 Category C $1,000 to $5,000

39	Failure to remove finished compost within 18 months of completion of composting process	K.A.R. 28-29-25a(b)(3) K.A.R. 28-29-25b(b)(6) K.A.R. 28-29-25c(b)(6) K.A.R. 28-29-25d(b)(8) K.A.R. 28-29-25e(b)(9) K.A.R. 28-29-25f(b)(10)	Category B $500 to $2,500 Category C $1,000 to $5,000
40	Failure to meet closure requirements and post-closure requirements.	K.A.R. 28-29-25a(c) K.A.R. 28-29-25b(c) K.A.R. 28-29-25c(c) K.A.R. 28-29-25d(c) K.A.R. 28-29-25e(c) K.A.R. 28-29-25f(c) K.A.R. 28-29-31(f) K.A.R. 28-29-31a(d) K.A.R. 28-29-121 K.A.R. 28-29-321	Category B $500 to $2,500 Category C $1,000 to $5,000
41	Failure to properly manage leachate.	K.A.R. 28-29-25c(a)(1)(C) K.A.R. 28-29-25d(a)(1)(C) K.A.R. 28-29-25e(a)(1)(C) K.A.R. 28-29-25f(a)(1)(C) K.A.R. 28-29-104(g) K.A.R. 28-29-104(h) K.A.R. 28-29-104(i)	Category B $500 to $2,500 Category C $1,000 to $5,000
42	Failure to meet the requirements for survey controls.	K.A.R. 28-29-108(l)	Category B $500 to $2,500 Category C $1,000 to $5,000
43	Failure to meet the requirements for special waste.	K.A.R. 28-29-109	Category B $500 to $2,500 Category C $1,000 to $5,000
44	Failure to comply with the medical services waste requirements.	K.A.R. 28-29-27	Category B $500 to $2,500 Category C $1,000 to $5,000
45	Failure to comply with the waste tire processing and disposal standards or the beneficial use of waste tires standards.	K.A.R. 28-29-29 K.A.R. 28-29-29a	Category B $500 to $2,500 Category C $1,000 to $5,000
46	Failure to remove pyrolytic oil and contaminated soil from a tire fire released into the environment sufficient to meet all regulatory requirements.	K.A.R. 28-29-31(e)	Category B $500 to $2,500 Category C $1,000 to $5,000
47	Failure to display current waste tire transporter permit issued by KDHE as required.	K.A.R. 28-29-33(a)	Category B $500 to $2,500 Category C $1,000 to $5,000

48	Failure to comply with financial assurance requirements or insurance requirements.	K.A.R. 28-29-30(d)(1)(C) K.A.R. 28-29-30(d)(2)(B) K.A.R. 28-29-32(c)(3) K.A.R. 28-29-2101 K.A.R. 28-29-2102 K.A.R. 28-29-2103 K.A.R. 28-29-2104 K.A.R. 28-29-2105 K.A.R. 28-29-2106 K.A.R. 28-29-2107 K.A.R. 28-29-2108 K.A.R. 28-29-2109 K.A.R. 28-29-2110 K.A.R. 28-29-2111 K.A.R. 28-29-2112 K.A.R. 28-29-2113 K.A.R. 28-29-2201	Category B $1,500 to $2,500 Category C $2,500 to $5,000
49	Failure to conduct or document random inspections of incoming loads, train employees to conduct these inspections, or to notify KDHE as required if hazardous waste or PCBs are found.	K.A.R. 28-29-108(a)	Category B $500 to $2,500 Category C $1,000 to $5,000
50	Failure to provide and maintain adequate daily cover.	K.A.R. 28-29-108(b)	Category B $500 to $2,500 Category C $1,000 to $5,000
51	Failure to provide and maintain adequate intermediate cover.	K.A.R. 28-29-108(c)	Category B $500 to $2,500 Category C $1,000 to $5,000
52	Failure by a C&D landfill to provide and maintain adequate cover.	K.A.R. 28-29-308(k)	Category B $500 to $2,500 Category C $1,000 to $5,000
53	Failure to comply with the liquids restrictions.	K.A.R. 28-29-108(k)	Category B $500 to $2,500 Category C $1,000 to $5,000
54	Failure to deposit waste in the smallest practical area, and at the lowest practical part of the active face (or as directed in operational plan). Also failure to compact waste to the highest achievable density as required by regulation.	K.A.R. 28-29-108(m) K.A.R. 28-29-308(g) K.A.R. 28-29-308(h)	Category B $500 to $2,500 Category C $1,000 to $5,000
55	Failure to meet the requirements for phasing of landfill operations.	K.A.R. 28-29-108(n) K.A.R. 28-29-304(f)	Category B $500 to $2,500 Category C $1,000 to $5,000
56	Working face too large and/or slopes too steep.	K.A.R. 28-29-108(o)	Category B $500 to $2,500 Category C $1,000 to $5,000
57	Failure to have and maintain adequate equipment, utilities, systems and related appurtenances, to remain in compliance with regulations.	K.A.R. 28-29-108(r)(1) K.A.R. 28-29-108(r)(2) K.A.R. 28-29-108(r)(3)	Category B $500 to $2,500 Category C $1,000 to $5,000

58	Failure to comply with groundwater monitoring requirements.	K.A.R. 28-29-111 K.A.R. 28-29-112 K.A.R. 28-29-113	Category B $500 to $2,500 Category C $1,000 to $5,000
59	Failure to comply with the requirements for Corrective Action.	K.A.R. 28-29-114	Category B $500 to $2,500 Category C $1,000 to $5,000
60	Failure to comply with the Standards for Waste Tire Management.	K.A.R. 28-29-28 through 33	Category B $300 to $2,500 Category C $1,000 to $5,000
61	Failure to establish used tire value.	K.A.R. 28-29-28a(a)	Category B $300 to $2,500 Category C $1,000 to $5,000
62	Failure to maintain used tire sales records.	K.A.R. 28-29-28a(c)	Category B $300 to $2,500 Category C $1,000 to $5,000
63	Failure to control mosquito breeding and other disease vectors.	K.A.R. 28-29-29b	Category B $300 to $2,500 Category C $1,000 to $5,000
64	Failure to receive other beneficial use approval in writing by KDHE.	K.A.R. 28-29-29a(2)(G)	Category B $300 to $2,500 Category C $1,000 to $5,000
65	Failure to store tires outside by ricking, storing in racks, and/or storing on treads..	K.A.R. 28-29-31(b)(2)	Category B $300 to $2,500 Category C $1,000 to $5,000
66	Failure to limit the size of the storage area to no larger than the allowed dimensions.	K.A.R. 28-29-31(b)(3)	Category B $300 to $2,500 Category C $1,000 to $5,000
67	Failure to locate storage area at least 60 feet from building.	K.A.R. 28-29-31(c)(1)	Category B $300 to $2,500 Category C $1,000 to $5,000
68	Failure to provide access for fire-fighting equipment	K.A.R. 28-29-31(c)(2)	Category B $300 to $2,500 Category C $1,000 to $5,000
69	Failure to prohibit all activities involving open flames, etc. within 25 feet of storage area.	K.A.R. 28-29-31(c)(3)	Category B $300 to $2,500 Category C $1,000 to $5,000
70	Failure to maintain vegetation within 100 feet of storage area.	K.A.R. 28-29-31(c)(4)	Category B $300 to $2,500 Category C $1,000 to $5,000
71	Failure to develop a 50-foot wide fire lane around perimeter of each storage area.	K.A.R. 28-29-31(c)(2)(A)	Category B $300 to $2,500 Category C $1,000 to $5,000
72	Failure to display educational materials at the facility.	K.S.A. 65-3424i(c)	Category B $300 to $2,500 Category C $1,000 to $5,000
73	Failure to use a permitted tire transporter and/or maintain records of transactions for at least three years.	K.S.A. 65-3424b(c)	Category B $300 to $2,500 Category C $1,000 to $5,000
74	Failure to transfer ownership of waste tires only to a person who has a permit, intends to use tires for a beneficial use, or is a tire retailer.	K.S.A. 65-3424a(b)	Category B $300 to $2,500 Category C $1,000 to $5,000
75	Failure to maintain receipts from permitted tire transporter.	K.S.A. 65-3424b(c)	Category B $300 to $2,500 Category C $1,000 to $5,000

ADJUSTMENT FACTORS:

Multi-day violations can be calculated in two ways:

A. Increase total penalty by 5% - 20%.
B. Apply a multiplier of 5% to 20% to the base penalty amount and multiply the product by the number of days that the violation occurred, up to a maximum of 180 days.

Note:
The Kansas Statutes Annotated does not give KDHE authority to penalize for the following common violations cited to tire retailers. This list is not to be considered complete, and is only included for convenience because these are commonly cited violations:

K.S.A. 65-3424a(a) Maintaining an illegal waste tire accumulation.
K.S.A. 65-3424b(e)(9)(B) Failure to transport fewer than five waste tires for lawful disposal
K.S.A. 65-3424b(e) Operating a waste tire collection center, waste tire processing facility, mobile waste tire processor, or waste tire transporter, without a permit.
K.S.A. 65-3424d Failure to provide proof of payment of $.25 tire excise tax.

ATTACHMENT A

UNLAWFUL DISPOSAL OF SOLID WASTE AND/OR OPEN BURNING OF SOLID WASTE ASSESSMENT

Type of Waste	C&D waste (inert waste with little chance of blowing and/or contamination of surface water, air, or groundwater)	MSW (potential vectors, odor problems, air and/or surface water issues)	Any type of solid waste with a potential to cause contamination of surface water, air, groundwater and/or serious nuisance conditions	
	1	2	3-5	
Amount of Waste	< 2 tons	2 to 10 tons	>10 up to 100 tons	> 100 tons
	1	2-3	4-5	6-8
Location of Disposal	Property owned by the individual or business doing the dumping, or on property owned by someone else but with that owner's permission	Wrong type of landfill	Property owned by someone else without their permission	
	1	2-3	4-5	

BASE AMOUNT	1st Offense	2nd Offense	3rd Offense
Individual, not related to business activity	$200*	$500	$800
Individual and/or business as part of a business activity (roofing company, rental homes, etc.)	$400	$1,000	$2,500
Solid waste company whose primary business is transporting and disposing of solid waste	$1,000	$2,500	$4,000

POINTS FOR DUMPING	
Type of Waste	
Amount of Waste	
Location of Disposal	
Total Points	0
Base Amount	

POINTS FOR BURNING	
Type of Waste	
Amount of Waste	
Location of Disposal	
Total Points	0

(Total Points for Dumping x $50) + (Total Points for Burning x $50) + Base Amount = Total Penalty

Total Penalty = $0.00

*Individuals who clean-up their dumped waste when directed by the district office will not typically receive a penalty if the dumping occurred on their own property or on someone else's property with permission. If the waste was not cleaned up, the penalty should be calculated and held in abeyance pending clean-up and assessed only if clean-up is not achieved as directed.

Note: If the waste has not been cleaned up, all orders and letters should include direction to clean-up the waste and to submit receipts documenting proper disposal. Each individual should also be directed to cease and desist from any further dumping.

ATTACHMENT B
OPERATING A SOLID WASTE DISPOSAL AREA WITHOUT A PERMIT

Type of Waste	C&D Waste (inert waste with little chance of blowing and/or contamination of surface water or groundwater)	MSW (potential vectors, odor problems and surface water issues)	Any type of solid waste with a potential to cause contamination of surface water or groundwater or serious nuisance conditions	
	1	2	3-5	
Length of time operating	< 6 months	6 months up to 1 year	>1 year up to 5 years	>5 up to 10 years
	1	2-3	4-5	6-8
Amount of Waste	< 2 tons	2 to 10 tons	>10 up to 100 tons	> 100 tons
	1	2-3	4-5	6-8

BASE AMOUNT	1st Offense	2nd Offense	3rd Offense
Individual and/or business as part of a business activity (roofing company, rental homes, etc.)	$1,000	$2,500	$3,500
Solid waste company whose primary business is transporting and disposing of solid waste	$2,000	$3,500	$5,000

Points	
Type of Waste	
Length of time	
Amount of Waste	
Total Points	0

Base Amount	

(Total Points x $500) + Base Amount = Total Penalty

Total Penalty = $0.00

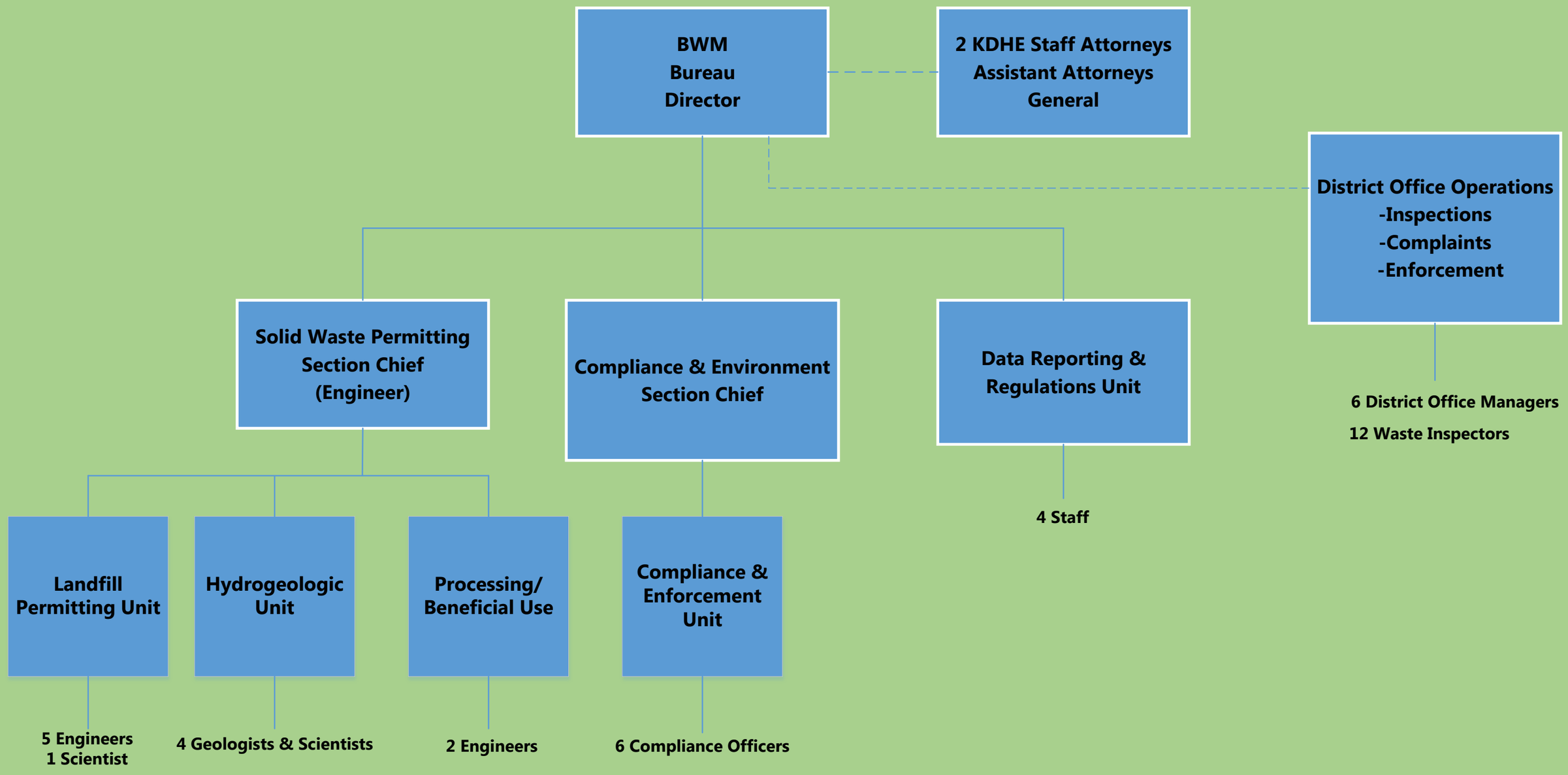
Notes:

1. This attachment should be used for dumpsites that have been utilized like a landfill by a single entity or multiple entities. Examples would include (but not be limited to a property where the property owner has brought waste from multiple sources to the dumpsite or has allowed multiple people/companies to dump waste at the dumpsite on more than one occasion; any entity that accepts monetary or other compensation for allowing dumping of waste; property where a person/company repeatedly dumps their waste, that was generated through a business transaction, to avoid disposal costs.
2. If the waste has not been cleaned up, all orders and letters should include direction to clean-up the waste and to submit receipts documenting proper disposal.
3. It is assumed that anything over 10 tons would include more than one load of waste and therefore the penalty amount could exceed $5,000 due to assumed multiple occurrences.
4. Greater than 10 years, do not use this attachment.

Appendix F

Solid Waste Program Resources

Solid Waste Program Staff Who May be Used to Implement CCR Permitting Program



*** Note: Total FTE Count of 45 will perform other duties in addition to CCR permitting, compliance monitoring, & enforcement.**

Appendix G

Attorney General Statement/Legal Certification

Attorney Statement for Final Authorization of

Coal Combustion Residuals Permit Program

I, hereby certify, pursuant to my authority as legal counsel for the Kansas Department of Health and Environment ("KDHE"), and in accordance with Section 4005(d)(1) of the Solid Waste Disposal Act ("SWDA")(42 U.S.C. 6901 *et seq.*), that in my opinion the laws and regulations of the State of Kansas provide adequate authority to carry out the Coal Combustion Residuals ("CCR") Permit Program as set forth in the Narrative Description submitted herewith by KDHE.

I have reviewed KDHE's application and supporting documentation and hereby certify:

1. That KDHE has sufficient legal authority provided by Kansas's lawfully enacted statutes and regulations to implement the CCR Permit Program.
2. That such statutes and regulations are in full force and effect on the date of this certification.
3. That KDHE possesses the authority to issue and enforce CCR permits pursuant to K.S.A.65-3406.
4. That KDHE possesses the authority to enforce standards adopted pursuant to K.S.A. 65-3401 *et seq*.
5. That All conditions of the revised Model CCR Permit are fully enforceable pursuant to KDHE's statutory and regulatory framework.
6. That all CCR permits in the State of Kansas will be revised to mirror the Model CCR permit included in this application upon EPA authorization of KDHE's CCR Permit Program.

Copies of all statutes, regulations, and proposed standards and conditions relevant to this application are included with the CCR Permit Program application to assist EPA's review.

Date: 6/27/18

Jennifer E. Hackman
Attorney for KDHE
Special Assistant Attorney General

Appendix H

Generic CCR Inspection Checklist

Generic CCR Inspection Checklist
2016

Facility:
SW Permit No.:
Note: All citations are federal 40 CFR Part 257 regulations, which became effective October 19, 2015.

Facility's Operating Record	**YES**	**NO**	**N/A**
1. Have the CCR operating procedures been incorporated into the facility's operating plan? [To be adopted under 40 CFR §257.105]	☐	☐	☐
2. Does the facility's operating record have a fugitive dust control plan. [To be adopted under 40 CFR §257.80]	☐	☐	☐
3. Does the facility have a stormwater run-on/run-off control plan? [To be adopted under 40 CFR §257.8(c)(3)] **(October 17, 2016)**	☐	☐	☐
4. Is the stormwater run-on/run-off control plan posted on the facility's website? [To be adopted under 40 CFR §257.107(g)(3)] **(October 17, 2016)**	☐	☐	☐
Industrial Landfill Inspections			
Weekly Inspections			
5. Does the facility conduct an inspection of the landfill at least once every seven days? [To be adopted under 40 CFR §257.84(a)(1)(i)]	☐	☐	☐
6. Is the inspection conducted by a qualified individual? [To be adopted under 40 CFR §257.84(a)]	☐	☐	☐
7. Are the inspections conducted in accordance with §1.7.3 of the facility's operating plan?	☐	☐	☐
8. Are records of the inspections maintained in the facility's operating record? [To be adopted under 40 CFR 257.105(g)(8)]	☐	☐	☐
Annual Inspections			
9. Has the facility conducted annual CCR Unit inspections by a qualified professional engineer? [To be adopted under 40 CFR §257.84(b)(1)]	☐	☐	☐
10. If yes, does the inspection include the following:			
a. A review of available information regarding the status and condition of the CCR unit? [To be adopted under 40 CFR 257.84(b)(1)(i)]	☐	☐	☐
b. A visual inspection to identify signs of distress or malfunction? [To be adopted under 40 CFR 257.84(b)(1)(ii)]	☐	☐	☐
11. Have the annual reports been placed in the facility's operating record? [To be adopted under 40 CFR §257.105(g)(9)]	☐	☐	☐
12. Does the report address the following:			
a. Any changes in geometry? [To be adopted under 40 CFR 257.84(b)(2)(i)]	☐	☐	☐
b. Approximate volume of CCR in the unit? [To be adopted under 40 CFR 257.84(b)(2)(ii)]	☐	☐	☐
c. Appearances of actual or potential structural weaknesses in addition to existing conditions that are or have the potential to disrupt operation and safety? [To be adopted under 40 CFR 257.84(b)(2)(iii)]	☐	☐	☐
d. Any other changes that may have affected the stability or operation of the unit since the previous inspection? [To be adopted under 257.84(b)(2)(iv)]	☐	☐	☐
13. Are these inspections conducted within one year from the date of the previous inspection? [To be adopted under 40 CFR 257.84(b)(4)]	☐	☐	☐
14. Have these reports been made available on the facility's website? [To be adopted under 40 CFR §257.107(g)(7)]	☐	☐	☐

Surface Impoundment Inspections

Weekly Inspections

15. Does the facility conduct an inspection of each impoundment at least once every seven days? [To be adopted under 40 CFR §257.83(a)(1)(i)] ☐ ☐ ☐
16. Is the inspection conducted by a qualified individual? [To be adopted under 40 CFR §257.83(a)] ☐ ☐ ☐
17. Are all CCR unit instrumentation monitored at least once every 30 days? [To be adopted under 40 CFR 257.83(a)(1)(iii)] ☐ ☐ ☐
18. Are the inspections conducted in accordance with §1.7.3 of the facility's operating plan? ☐ ☐ ☐
19. Are records of the inspections maintained in the facility's operating record? [To be adopted under 40 CFR 257.105(g)(5)] ☐ ☐ ☐

Annual Inspections

20. Has the facility conducted annual CCR Unit inspections by a qualified professional engineer? [To be adopted under 40 CFR §257.83(b)(1)] ☐ ☐ ☐
21. If yes, does the inspection include the following:
    a. A review of available information regarding the status and condition of the CCR unit? [To be adopted under 40 CFR 257.83(b)(1)(i)] ☐ ☐ ☐
    b. A visual inspection to identify signs of distress or malfunction? [To be adopted under 40 CFR 257.83(b)(1)(ii)] ☐ ☐ ☐
    c. A visual inspection of any underlying hydraulic structures or passing through the dike of the unit for structural integrity and continued safe and reliable operation? [To be adopted under 40 CFR 257.83(b)(1)(iii)] ☐ ☐ ☐
22. Have the annual reports been placed in the facility's operating record? [To be adopted under 40 CFR §257.105(g)(6)] ☐ ☐ ☐
23. Does the report address the following:
    a. Any changes in geometry? [To be adopted under 40 CFR 257.83(b)(2)(i)] ☐ ☐ ☐
    b. The location and type of existing instrumentation and maximum recorded readings since the previous inspection? [To be adopted under 40 CFR 257.83(b)(2)(ii)] ☐ ☐ ☐
    c. Approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous inspection? [To be adopted under 40 CFR 257.83(b)(2)(iii)] ☐ ☐ ☐
    d. The storage capacity of the impounding structure at the time of the inspection? [To be adopted under 257.83(b)(2)(iv)] ☐ ☐ ☐
    e. Approximate volume of impounded water and CCR at the time of the inspection? [To be adopted under 257.83(b)(2)(v)] ☐ ☐ ☐
    f. Appearances of actual or potential structural weaknesses in addition to existing conditions that are or have the potential to disrupt operation and safety? [To be adopted under 257.83(b)(2)(vi)] ☐ ☐ ☐
    g. Any other changes that may have affected the stability or operation of the unit since the previous inspection? [To be adopted under 257.83(b)(2)(vii)] ☐ ☐ ☐
24. Are these inspections conducted within one year from the date of the previous inspection unless a quinquennial assessment is required? [To be adopted under 40 CFR 257.84(b)(4)] ☐ ☐ ☐

Surface Impoundment Requirements

25. Has the facility installed a permanent identification marker, at least six feet tall, showing the CCR unit ID, name associated with unit, and the name of the operator? [To be adopted under 40 CFR 257.73(a)(1)] ☐ ☐ ☐
26. Has the facility conducted an initial hazard potential classification assessment? [To be adopted under 40 CFR 257.73(a)(2)] **(October 17, 2016)** ☐ ☐ ☐

27. If classified as a high hazard potential, has the facility developed an emergency action plan and does it address the following? [To be adopted under 40 CFR 257.73(a)(3)(i)] **(April 17, 2017)**	☐	☐	☐
a. Define CCR unit safety emergencies and procedures to detect safety emergencies? [To be adopted under 40 CFR 257.73(a)(3)(i)(A)]	☐	☐	☐
b. Define responsible persons, respective responsibilities, and notification procedures in the event of a safety emergency? [To be adopted under 40 CFR 257.73(a)(3)(i)(B)]	☐	☐	☐
c. Provide emergency responder contact information? [To be adopted under 40 CFR 257.73(a)(3)(i)(C)]	☐	☐	☐
d. A map delineating the downstream area affected by a CCR unit failure and a description of the CCR unit? [To be adopted under 40 CFR 257.73(a)(3)(i)(D)]	☐	☐	☐
e. Provisions for annual face-to-face meetings or exercises between facility personnel and emergency responders? [To be adopted under 40 CFR 257.73(a)(3)(i)(E)]	☐	☐	☐
28. Has the facility compiled a history of construction which contains the following? [To be adopted under 40 CFR 257.73(c)(1)] **(October 17, 2016)**	☐	☐	☐
a. The name and address of the owner or operator of the CCR unit, the name associated with the unit, and the ID number of the unit? [To be adopted under 40 CFR 257.73(c)(1)(i)]	☐	☐	☐
b. The location of the CCR unit in the most recent U.S. Geological Survey topographic quadrangle map or equivalent? [To be adopted under 40 CFR 257.73(c)(1)(ii)]	☐	☐	☐
c. A statement of the purpose for which the CCR unit is being used? [To be adopted under 40 CFR 257.73(c)(1)(iii)]	☐	☐	☐
d. The name and size in acres of the watershed the unit is located in? [To be adopted under 40 CFR 257.73(c)(1)(iv)]	☐	☐	☐
e. A description of the physical and engineering properties of the foundation and abutment materials the unit is constructed in? [To be adopted under 40 CFR 257.73(c)(1)(v)]	☐	☐	☐
f. A statement of the type, size, range, and physical and engineering properties of the construction materials for each zone of the unit, the method of site preparation and construction, and the approximate dates of construction for each successive stage of construction? [To be adopted under 40 CFR 257.73(c)(1)(vi)]	☐	☐	☐
g. Is the information at a scale detailing engineering structures and appurtenances, dimensional drawings including a plan view and cross sections which detail all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, slope protection, and normal and maximum pool elevations, maximum depth, and any natural or manmade features that may affect operation of the unit? [To be adopted under 40 CFR 257.73(c)(1)(vii)]	☐	☐	☐
h. A description of the type, purpose, and location of existing instrumentation? [To be adopted under 40 CFR 257.73(c)(1)(viii)]	☐	☐	☐
i. Area-capacity curves for the unit? [To be adopted under 40 CFR 257.73(c)(1)(ix)]	☐	☐	☐
j. A description of each spillway and diversion design features and capacities and calculations used in their determination? [To be adopted under 40 CFR 257.73(c)(1)(x)]	☐	☐	☐
k. The construction specifications and provisions for surveillance, maintenance, and repair? [To be adopted under 40 CFR 257.73(c)(1)(xi)]	☐	☐	☐
l. Record or knowledge of structural instability? [To be adopted under 40 CFR 257.73(c)(1)(xii)]	☐	☐	☐

29. Has the facility conducted and documented structural stability assessments that show the unit was designed, constructed, operated, and maintained with the following? [To be adopted under 40 CFR 257.73(d)(1)] **(October 17, 2016)** ☐ ☐ ☐
    a. Stable foundations and abutments? [To be adopted under 40 CFR 257.73(d)(1)(i)] ☐ ☐ ☐
    b. Adequate slope protection against surface erosion, wave action and adverse effects of sudden drawdown? [To be adopted under 40 CFR 257.73(d)(1)(ii)] ☐ ☐ ☐
    c. Dikes of sufficient density to withstand the range of loading conditions in the unit? [To be adopted under 40 CFR 257.73(d)(1)(iii)] ☐ ☐ ☐
    d. Single or combinations of spillways configured and designed sufficiently to manage all hazard potentials in the unit? [To be adopted under 40 CFR 257.73(d)(1)(v)] ☐ ☐ ☐
    e. Hydraulic structures underlying the base or passing through the dike of the CCR unit which maintain the structural integrity of the unit and free of defects? [To be adopted under 40 CFR 257.73(d)(1)(vi)] ☐ ☐ ☐
    f. Designed to maintain structural integrity and sufficiently handle inundation from adjacent bodies of water? [To be adopted under 40 CFR 257.73(d)(1)(vii)] ☐ ☐ ☐
30. Has the unit been designed, constructed, operated, and does it maintain an inflow design flood control system which: **(October 17, 2016)**
    a. Adequately manages flow into the CCR unit during and following the peak discharge of the inflow design flood? [To be adopted under 40 CFR 257.82(a)(1)] ☐ ☐ ☐
    b. Adequately manages flow from the CCR unit to collect and control the peak discharge resulting from the inflow design flood? [To be adopted under 40 CFR 257.82(a)(2)] ☐ ☐ ☐

Field Assessment

31. Are CCRs at the facility being handled in accordance with the facility's fugitive dust control plan? [To be adopted under 40 CFR §257.80] ☐ ☐ ☐

Website Construction and Implementation

32. Determine if the CCR disposal facility has established a website titled "CCR Rule Compliance Data and Information" and is available to the public. [To be adopted under 40 CFR §257.107(a)] ☐ ☐ ☐
33. Determine if any notification to KDHE has taken place. [To be adopted under 40 CFR §257.106 (e-i)] ☐ ☐ ☐

Closure and Post-Closure Plan

34. Does the facility have a written closure plan? [To be adopted under 40 CFR §257.102(b)(2)] **(October 17, 2016)** ☐ ☐ ☐
35. Does the facility have a written post-closure plan? [To be adopted under 40 CFR §257.104(d)(2)] **(October 17, 2016)** ☐ ☐ ☐

Groundwater Monitoring

36. Does the facility have a groundwater sampling and analysis plan? [To be adopted under 40 CFR §257.93(a)] **(October 17, 2017)** ☐ ☐ ☐
37. Does the facility have a statistical analysis plan? [To be adopted under 40 CFR §257.90(b)(1)(ii)] **(October 17, 2017)** ☐ ☐ ☐
38. Has the facility installed groundwater monitoring wells? [To be adopted under 40 CFR §257.90(b)(1)(i)] **(October 17, 2017)** ☐ ☐ ☐
39. Has the facility collected background groundwater samples? [To be adopted under 40 CFR 257.90(b)(1)(iii)] **(October 17, 2017)** ☐ ☐ ☐

40. Does the facility have certification from a professional engineer for their groundwater program? [To be adopted under 40 CFR §257.91(f)] **(October 17, 2017)** ☐ ☐ ☐
41. Does the facility have certification from a professional engineer for their groundwater statistical analyses? [To be adopted under 40 CFR §257.93(f)(6)] **(October 17, 2016)** ☐ ☐ ☐
42. Does the facility have a copy of their initial Annual Groundwater Report? [To be adopted under 40 CFR §257.90(e)] **(October 17, 2018)** ☐ ☐ ☐

Inactive Surface Impoundments

(If a violation is found within this section, simply make a comment but do not cite)

43. Describe any observations made on the water discharged into these units.

44. Describe any observations made on vegetation around the bermed unit.

45. Please describe any other observations made regarding the condition of these units.

Consolidated Checklist

40 CFR Part 257 Subpart D

Consolidated Checklist
Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments
40 CFR Part 257 Subpart D as of July 1, 2017

Name of State:	Kansas
State Statutory Authority:	Kansas Statutes Annotated (KSA), Chapter 65-Pubic Health Article 34-Solid Waste
Title of Standards:	Kansas Coal Combustion Residuals Standards (KCS)
Effective Date:	Date of program approval by EPA
Date Checklist Completed:	July 10, 2018

Substitution of Terms

The following state-specific terms will occur throughout the Kansas Coal Combustion Residuals (CCR) Standards. The correspondence between federal terms and state-specific terms are addressed in this section of the checklist rather than addressing each instance where the terms are used.

Federal Term	State Term	Comment
Dates and deadlines that occur before the effective date of the Kansas CCR Standards	The effective date of the Kansas CCR Standards, with the following exceptions: • Dates that determine the applicability of the Kansas CCR Standards [KCS 257.50(e)] and • Dates that determine the status of a CCR unit [KCS 257.53]	The substitutions are made to clarify that Kansas cannot enforce non-compliance with deadlines that occurred before the effective date of the Kansas CCR Standards. These substitutions are made in accordance with *"Guidelines for State Adoption of Federal RCRA Regulations by Reference".*
"Qualified professional engineer"	"Qualified groundwater scientist", in the following locations: 257.60(b) 257.90-95 In 257.96-98, certification may be made by either a qualified professional engineer or a qualified groundwater scientist, depending on whether or not the release is a groundwater release or a non-groundwater release.	A licensed geologist who is a "qualified groundwater scientist" is as qualified to perform groundwater-related tasks as a "qualified professional engineer." **See Narrative, Section VIII B, Flexibility 1.**
Resource Conservation and Recovery Act (RCRA) – references	References to RCRA in general and specific RCRA citations are replaced with state-specific references.	These substitutions are made in accordance with *"Guidelines for State Adoption of Federal RCRA Regulations by Reference".*
"State director" and related terms: • "Relevant state director and/or appropriate tribal authority" • "State director and/or appropriate tribal authority"	"Department" This term means the 'Kansas Department of Health and Environment' (KDHE) and is defined in KSA 65-3402(h).	"Department" is used where the action does not involve approval or other discretionary action.

Federal Term	State Term	Comment
"State director" and related terms: • "Director of approved participating state" • "Permitting authority of a participating state" • "State director of a participating state"	"Secretary" This term means the secretary of KDHE and is defined in KSA 65-3402(g).	"Secretary" is used where the action involves approval or other discretionary action.
This subpart	The Kansas CCR Standards	This substitution is made for clarity.
References to "requirements of this section"	Requirements of article 29, article 34, and the Kansas CCR Standards	This substitution is made as appropriate to ensure that all Kansas requirements are identified.

Comparison of Provisions

Shaded cells indicate additional state standards

*EQ = Equivalent; LP = Less Protective; MP = More Protective; BIS = Broader in Scope

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
General Provisions						
Scope and purpose	257.50, except: 257.50(a) & (b)	257.50	X			
Purpose	257.50(a)	No analog in the KCS	See comment below.			
	Comment: The language in 40 CFR 257.50(a) is not included in KCS 257.50 because it is explanatory rather than regulatory.					
Applicability	257.50(b)	257.50(b)	X			
	Comment: The term "CCR" is added before the word "landfills" for additional clarity. A comma is added after the word "units"; otherwise it appears that the language that follows "units" applies only to lateral expansions.					
Effective date	257.51	28-29-700	See comment below.			
	Comment: The effective date of the Kansas Coal Combustion Residuals Standards (KCS) is the date that the Kansas Coal Combustion Residuals Permitting Program is approved by the United States Environmental Protection Agency.					
Applicability of other regulations	257.52	257.52	X			
	Comment: The language in 40 CFR 257.52 has been slightly modified to make it clear that "compliance with the Kansas CCR Standards does not affect the need for the owner or operator… to comply with 40 CFR 257.3-1, 257.3-2, and 257.3-3."					
Definitions	257.53 *with the following exceptions*	257.53	X			
Introductory paragraph	257.53	257.53	X			
	Comment: The reference to "RCRA" is replaced with "the statutes in article 34 and the regulations in article 29" for definitions of terms not defined in 257.53.					
'CCR landfill' or 'landfill'	257.53	257.53	X			
	Comment: The state clarifies that subsurface mines where CCR are beneficially used as fill are not CCR landfills. The preamble to the 4/17/15 final rule, 80 FR 21353, discusses the allowable beneficial use of CCR as structural fill or flowable fill. A demonstration and approval by the secretary is required – see KCS 28-29-708.					
'CCR surface impoundment' or 'impoundment'	257.53	257.53	X			
	Comment: The state clarifies the types of units that are not CCR surface impoundments, as specified in the preamble to the 4/17/15 final rule, 80 FR 21357.					
'Disposal'	257.53	257.53	X			
	Comment: The reference to the federal statutory definition of "solid waste" is replaced with a reference to the Kansas statutory definition of "solid waste". The word "any" is inserted before the word "constituent" for clarity and consistency with the wording in the definition of disposal in 40 CFR 260.10.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
'Encapsulated use'	257.53	257.53	X			
	Comment: The state provides examples of 'encapsulated use, as specified in the preamble to the 4/17/15 final rule, 80 FR 21328. For the purposes of these standards, "includes" means "includes, but is not limited to".					
'Engineered slope protection measures' and 'Grassy vegetation'	Proposed 257.53	257.53	X			
	Comment: Kansas adds the definitions from the 3/15/18 proposed rule, 83 FR 11611.					
'Indian country' or 'Indian lands' and 'Indian Tribe' or 'Tribe'	257.53	No analog in the KCS	See comment below.			
	Comment: These definitions are not included in the Kansas CCR Standards because these terms are not used in the Kansas CCR Standards.					
'Non-groundwater releases'	Proposed 257.53	257.53	X			
	Comment: Kansas adds the definition from the 3/15/18 proposed rule, 83 FR 11611, and clarifies that 'non-groundwater releases' do not include discharges that occur in accordance with a permit issued by the state or federal government.					
'Participating state' and 'Pertinent surrounding areas'	Proposed 257.53	257.53	X			
	Comment: Kansas adds the definitions from the 3/15/18 proposed rule, 83 FR 11611.					
'Representative sample'	257.53	No analog in the KCS	See comment below.			
	Comment: This definition is not included in the Kansas CCR Standards because this term is not used in the Kansas CCR Standards or in 40 CFR Part 257 Subpart D.					
'Slope protection'	Proposed 257.53	257.53	X			
	Comment: Kansas uses the revised definition from the 3/15/18 proposed rule, 83 FR 11611.					
'State director'	257.53	No analog in the KCS	See comment below.			
	Comment: This definition is not included in the Kansas CCR Standards because Kansas replaces the term "state director" with "department" or "secretary" [see Substitution of Terms].					
'Vegetative height' and 'Woody vegetation'	Proposed 257.53	257.53	X			
	Comment: Kansas adds the definitions from the 3/15/18 proposed rule, 83 FR 11612.					
Additional Kansas Definitions and Provision						
'Appendix III'	No analog in 257 Subpart D	28-29-707(a)	X			
'Appendix IV'	No analog in 257 Subpart D	28-29-707(b)	X			
'Article 29'	No analog in 257 Subpart D	28-29-707(c)	X			
'Article 34'	No analog in 257 Subpart D	28-29-707(d)	X			
'Kansas CCR Standards' and 'KCS'	No analog in 257 Subpart D	28-29-707(e)	X			

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
'Point source'	No analog in 257 Subpart D	28-29-707(f)	X			
'Qualified groundwater scientist'	No analog in 257 Subpart D	28-29-707(g)	X			
'Waters of the state'	No analog in 257 Subpart D	28-29-707(h)	X			
Beneficial use approvals	No analog in 257 Subpart D	28-29-708			X	
	Comment: Kansas requires all beneficial uses of CCR, except certain specified uses, to be approved in writing by the secretary. The person using the CCR must demonstrate that the use is protective of public health and safety and the environment.					
Location Restrictions						
Placement above the uppermost aquifer	257.60	257.60	X			
Wetlands	257.61, except: • 257.61(a)	257.61, except: • 257.61(a)	X			
CCR unit location requirements	257.61(a)	257.61(a) & K.A.R. 28-29-102(c)	X			
	Comment: Kansas refers to the wetlands requirements which have already been adopted in the municipal solid waste landfill regulations.					
Fault areas	257.62	257.62	X			
Seismic impact zones	257.63	257.63	X			
Unstable areas	257.64	257.64	X			
Design Criteria						
Design criteria for new CCR landfills and lateral expansions	257.70, except: • 257.70(a)(1) • 257.70(e) • 257.70(f)	257.70, except: • 257.70(a)(1) • 257.70(e) • 257.70(f)	X			
Design criteria	257.70(a)(1)	257.70(a)(1)	X			
	Comment: Kansas adds a reference to KCS 28-29-721, which allows the secretary to grant waivers to design criteria – see following discussion of KCS 28-29-721.					
Waiver to design criteria.	No analog in 257 Subpart D	28-29-721	X			
	Comment: Kansas allows waivers to design criteria, subject to approval by the secretary after public notice of the waiver request has been given. The owner or operator must demonstrate that the proposed design is as protective as design requirements of 40 CFR Part 257, Subpart D. **See Narrative, Section VIII B, Flexibility 2.**					
Certification prior to construction	257.70(e)	257.70(e)	X			
	Comment: Kansas replaces "the requirements of this section" with "the requirements of the design approved by the secretary in accordance with KCS 28-29-770."					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Certification upon completion of construction	257.70(f)	257.70(f)	X			
	Comment: Kansas replaces "the requirements of this section" with "the requirements of the design approved by the secretary in accordance with KCS 28-29-770."					
Liner design criteria for existing CCR surface impoundments (SIs)	257.71	257.71	X			
Liner design criteria for new CCR SIs and lateral expansions	257.72	257.72	X			
Structural integrity criteria for existing CCR SIs	257.73, except: • 257.73(a)(4) • 257.73(d)(1)(ii) • 257.73(d)(1)(iv) • 257.73(d)(2) • 257.73(f)(2)	257.73, except: • 257.73(a)(4) • 257.73(d)(1)(ii) • 257.73(d)(1)(iv) • 257.73(d)(2) • 257.73(f)(2)	X			
Vegetated dikes/ slope protection	Proposed 257.73(a)(4), except: • Proposed 257.73(a)(4)(ii)(D) • Proposed 257.73(a)(4)(ii)(E)	257.73(a)(4), except: • 257.73(a)(4)(ii)(D) • 257.73(a)(4)(ii)(E)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612, except proposed 257.73(a)(4)(ii)(D) and (E).					
Woody vegetation	Proposed 257.73(a)(4)(ii)(D)	257.73(a)(4)(ii)(D)	X			
	Comment: Kansas maintains the performance standard while eliminating unnecessarily prescriptive language. **See Narrative, Section VIII B, Flexibility 3.**					
Vegetative height	Proposed 257.73(a)(4)(ii)(E)	257.73(a)(4)(ii)(E)	X			
	Comment: Kansas eliminates a prescriptive height for vegetation but requires mowing at least once per year to inhibit the growth of woody vegetation. **See Narrative, Section VIII B, Flexibility 3.**					
Adequate slope protection/slope protection consistent with (a)(4)	Proposed 257.73(d)(1)(ii)	257.73(d)(1)(ii)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612.					
Vegetative height not to exceed six inches	257.73(d)(1)(iv)	257.73(d)(1)(iv)	X			
	Comment: Kansas does not include this requirement, which was vacated from the federal regulations and is not included in the 3/15/18 proposed rule.					
If a deficiency or a release is identified during the periodic assessment	257.73(d)(2)	257.73(d)(2)	X			
	Comment: The text "of the CCR" is added to the second sentence to improve the grammar and clarity of the sentence.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Use of a previously completed assessment(s) in lieu of the initial assessment(s)	257.73(f)(2)	257.73(f)(2)	See comment below.			
	Comment: The text is altered to reflect the following: 1) Kansas cannot enforce completion of the initial assessment until the Kansas CCR Standards are in effect; and 2) periodic safety factor assessments are required every 5 years.					
Structural integrity criteria for new CCR SIs and lateral expansions of a CCR SI	257.74, except: • 257.74(a)(4) • 257.74(d)(1)(ii) • 257.74(d)(1)(iv) • 257.74(d)(2)	257.74, except: • 257.74(a)(4) • 257.74(d)(1)(ii) • 257.74(d)(1)(iv) • 257.74(d)(2)	X			
Vegetated dikes/ slope protection	Proposed 257.74(a)(4), except: • Proposed 257.74(a)(4)(ii)(D) • Proposed 257.74(a)(4)(ii)(E)	257.74(a)(4), except: • 257.74(a)(4)(ii)(D) • 257.74(a)(4)(ii)(E)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612, except proposed 257.74(a)(4)(ii)(D) and (E).					
Woody vegetation	Proposed 257.74(a)(4)(ii)(D)	257.74(a)(4)(ii)(D)	X			
	Comment: Kansas maintains the performance standard while eliminating unnecessarily prescriptive language. **See Narrative, Section VIII B, Flexibility 3.**					
Vegetative height	Proposed 257.74(a)(4)(ii)(E)	257.74(a)(4)(ii)(E)	X			
	Comment: Kansas eliminates a prescriptive height for vegetation but requires mowing at least once per year to inhibit the growth of woody vegetation. **See Narrative, Section VIII B, Flexibility 3.**					
Adequate slope protection/slope protection consistent with (a)(4)	Proposed 257.74(d)(1)(ii)	257.74(d)(1)(ii)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612.					
Vegetative height not to exceed six inches	257.73(d)(1)(iv)	257.73(d)(1)(iv)	X			
	Comment: Kansas does not include this requirement, which was vacated from the federal regulations and is not included in the 3/15/18 proposed rule.					
If a deficiency or a release is identified during the periodic assessment	257.74(d)(2)	257.74(d)(2)	X			
	Comment: The text "of the CCR" is added to the second sentence to improve the grammar and clarity of the sentence.					
Operating Criteria						
Air criteria	257.80	257.80	X			
Run-on and run-off controls for CCR landfills	257.81, except: • 257.81(b)	257.81, except: • 257.81(b)	X			
Run-off from the active portion of the CCR unit	257.81(b)	257.81(b)	X			
	Comment: Kansas replaces the federal language with state-specific language.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Hydrologic and hydraulic capacity requirements for CCR SIs	257.82, except: • 257.82(b)	257.82, except: • 257.82(b)	X			
Discharge from the CCR unit	257.82(b)	257.82(b)	X			
	Comment: Kansas replaces the federal language with state-specific language.					
Inspection requirements for CCR SIs	257.83, except: • 257.83(a)(1) • 257.83(b)(5)	257.83, except: • 257.83(a)(1) • 257.83(b)(5)	X			
Schedules for inspection by a qualified person	257.83(a)(1)	257.83(a)(1)	X			
	Comment: Kansas allows modifications to schedules for inspection by a qualified person – see following discussion of KCS 28-29-731.					
Alternative inspection schedules	No analog in 257 Subpart D	28-29-731	X			
	Comment: Alternative inspection schedules may be approved by the secretary under limited circumstances and after public notice has been given. **See Narrative, Section VIII B, Flexibility 4.**					
Remedy the deficiency or release	Proposed 257.83(b)(5)	257.83(b)(5)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612.					
Inspection requirements for CCR landfills	257.84, except: • 257.84(a)(1) • 257.84(b)(5)	257.84, except: • 257.84(a)(1) • 257.84(b)(5)	X			
Schedules for inspection by a qualified person	257.84(a)(1)	257.84(a)(1)	X			
	Comment: Kansas allows modifications to schedules for inspection by a qualified person – see previous discussion of KCS 28-29-731.					
Remedy the deficiency or release	Proposed 257.84(b)(5)	257.84(b)(5)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612.					
Groundwater Monitoring and Corrective Action						
Applicability	257.90, except: • 257.90(a) • 257.90(d) • 257.90(e) Proposed 257.90(g)	257.90, except: • 257.90(a) • 257.90(d) • 257.90(e) 257.90(g)	X			
Applicability	Proposed 257.90(a)	257.90(a)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11612.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Response to release	257.90(d) and proposed 257.90(d)	257.90(d)	X			
	Comment: Kansas retains the original federal language and adds the revised language from the 3/15/18 proposed rule, 83 FR 11612-11613.					
Annual groundwater monitoring and corrective action report	257.90(e)	257.90(e)	X			
	Comment: The date the first report is due is modified to reflect the fact that Kansas cannot enforce non-compliance with deadlines that occurred before the effective date of the Kansas CCR Standards.					
Suspension of groundwater monitoring requirements	Proposed 257.90(g)	257.90(g)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11613, with the substitution of terms discussed in the first section of this checklist.					
Groundwater monitoring systems	257.91, except: • 257.91(a)(2) • 257.91(d)(2)	257.91, except: • 257.91(a)(2) • 257.91(d)(2)	X			
Waste boundary monitoring well location	257.91(a)(2)	257.91(a)(2) 28-29-742	X			
	Comment: As contemplated in the preamble to the 4/17/15 final rule, 80 FR 21400. Kansas incorporates the concept of locating the downgradient monitoring system at "the closest practical distance from the waste boundary." Criteria for establishing the location are set forth in KCS 28-29-742. See the following discussion of KCS 28-29-742.					
Waste boundary	No analog in 257 Subpart D	28-29-742			X	
	Comment: Approval of the well location by the secretary is required. Review by the regulatory agency provides an additional level of environmental protection. **See Narrative, Section VIII B, Flexibility 5.**					
Multiunit groundwater monitoring systems	257.91(d)(2)	257.91(d)(2)	X			
	Comment: This paragraph has been modified to reflect the fact that waivers to the closure requirements of 257.101(a)(1) may be granted by the secretary in accordance with KCS 28-29-751.					
Groundwater sampling and analysis requirements	257.93, except: • 257.93(g)(5) • 257.93(g)(6)	257.93, except: • 257.93(g)(5) • 257.93(g)(6)	X			
Limit of detection and quantitation limit	257.93(g)(5)	257.93(g)(5)	X			
	Comment: In the first sentence, the word "be" is inserted after the word "shall." In the second sentence, the term "facility" is replaced with the phrase "owner or operator." These changes were made to improve the grammar and clarity of the paragraph.					
Procedures to control or correct for seasonal and spatial variability	257.93(g)(6)	257.93(g)(6)			X	
	Comment: Kansas requires that the statistical method correct for the impact of irrigation wells, in addition to the other factors listed in the paragraph.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Detection monitoring program	257.94, except: • 257.94(d)(1) • 257.94(e)(2) • 257.94(e)(3)	257.94, except: • 257.94(d)(1) • 257.94(d)(4) • 257.94(e)(2) • 257.94(e)(3)	X			
Documenting the need for less frequent sampling	257.94(d)(1)	257.94(d)(1)				
	Comment: The word "that" is deleted from the first sentence to improve the grammar and clarity of the sentence					
Alternative monitoring frequency approval	No analog in 257 Subpart D	257.94(d)(4)			X	
	Comment: An alternative monitoring frequency may only be used if it is approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Demonstration of alternate source or error	257.94(e)(2)	257.94(e)(2)			X	
	Comment: If there is a statistically significant increase over background levels for a constituent, the unit may remain in detection monitoring only if the demonstration is approved by the secretary (the unit may remain in detection monitoring until review of the demonstration has been completed by KDHE). Review by the regulatory agency provides an additional level of environmental protection. **See Narrative, Section VIII B, Flexibility 6.**					
Notification of assessment monitoring	257.94(e)(3)	257.94(e)(3)	X			
	Comment: The text "If an assessment monitoring program has been established" has been added to reflect the fact that, if a successful demonstration is made under 257.94(e)(2), the owner or operator may continue detection monitoring.					
Assessment monitoring program	257.95, except: • 257.95(c)(1) • 257.95(e) • 257.95(g) • 257.95(g)(3)(ii) & (g)(4) • 257.95(g)(5) • 257.95(h)(2) Proposed 257.95(j)	257.95, except: • 257.95(c)(1) • 257.95(c)(4) • 257.95(e) • 257.95(g) • 257.95(g)(3)(ii) & (g)(4) • 257.95(g)(5) • 257.95(h)(2) 257.95(j)	X			
Documenting the need for less frequent sampling	257.95(c)(1)	257.95(c)(1)	X			
	Comment: The word "that" is deleted from the first sentence to improve the grammar and clarity of the sentence					
Alternative monitoring frequency approval	No analog in 257 Subpart D	257.95(c)(4)			X	
	Comment: An alternative monitoring frequency may only be used if it is approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Return to detection monitoring	257.95(e)	257.95(e)			X	
	Comment: The owner or operator may return to detection monitoring only if the demonstration is approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
App IV constituents at statistically significant levels above the groundwater protection standard	257.95(g)	257.95(g)				
	Comment: The text "Unless a successful demonstration is made in accordance with paragraph (3)(ii) of this subsection," has been added to reflect the fact that, if a successful demonstration is made under 257.95(g)(3)(ii), the owner or operator is not required to initiate the assessment of corrective measures.					
Demonstration of alternate source or error	257.95(g)(3)(ii) & (g)(4)	257.95(g)(3)(ii) & (g)(4)			X	
	Comment: If the owner or operator wants to make an alternate source or error demonstration, the demonstration must be reviewed by KDHE. If the secretary does not approve the demonstration, the owner or operator must initiate an assessment of corrective measures within 90 days of notification that the demonstration was not approved. Review by the regulatory agency provides an additional level of environmental protection. **See Narrative, Section VIII B, Flexibility 7.**					
Existing unlined CCR surface impoundment	257.95(g)(5)	257.95(g)(5)	X			
	Comment: This paragraph has been modified to reflect the fact that waivers to the closure requirements of 257.101(a)(1) may be granted by the secretary in accordance with KCS 28-29-751. See discussion of KCS 28-29-751.					
Maximum contaminant level (MCL)	257.95(h)(1)	257.95(h)(1) 28-29-741(b)	X			
	Comment: In KCS 257.95(h)(1), the federal reference to maximum contaminant levels (MCLs) is replaced with a reference to KCS 28-29-741. KCS 28-29-741(b) contains the MCLs from 40 CFR 141.62 and 141.66 for constituents listed in Appendix IV.					
Constituents for which an MCL has not been established	257.95(h)(2)	257.95(h)(2)	X			
	Comment: Kansas uses the revised language from the 3/15/18 proposed rule, 83 FR 11613.					
Alternative groundwater protection standard	Proposed 257.95(j)	257.95(j)	X			
	Comment: Kansas uses the language from the 3/15/18 proposed rule, 83 FR 11613, with the substitution of terms discussed in the first section of this checklist. Kansas includes language concerning carcinogens, which was discussed in the preamble, but not included in the proposed rule. Kansas does not incorporate the documents listed in proposed 40 CFR 257.95(j)(1)(i). See the following discussion of KCS 28-29-743.					
Alternative groundwater protection standard	No analog in 257 Subpart D	28-29-743	X			
	Comment: This regulation specifies how an owner or operator may request that the secretary establish an alternative groundwater protection standard for a constituent for which an MCL has not been established.					
Assessment of corrective measures	257.96, except: • 257.96(a) • 257.96(b) • 257.96(e)	257.96, except: • 257.96(a) • 257.96(b) • 257.96(e)	X			

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Deadline for demonstration of need for additional time to complete the assessment of corrective measures	257.96(a)	257.96(a)			X	
	Comment: The owner or operator may extend the deadline only if the demonstration is approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Assessment monitoring	257.96(b)	257.96(b)	X			
	Comment: The text "If the unit is in an assessment monitoring program," has been added to the beginning of the paragraph to clarify that if the unit is only in detection monitoring, which may the case for a non-groundwater release, the unit does not have to start assessment monitoring.					
Public meeting to discuss the results of the corrective measures assessment	257.96(e)	257.96(e)	X			
	Comment: Kansas adds a requirement to notify KDHE at least 30 days prior to the public meeting.					
Selection of remedy	257.97, except: • 257.97(a) • 257.97(b)(2) • proposed 257.97(f)	257.97, except: • 257.97(a) • 257.97(b)(2) • 257.97(f)	X			
Final report describing the selected remedy	257.97(a)	257.97(a)			X	
	Comment: The report must be approved by the secretary before it is considered complete. Review by the regulatory agency provides an additional level of environmental protection.					
Groundwater protection standard	257.97(b)(2)	257.97(b)(2)	X			
	Comment: Kansas adds language to clarify that the groundwater protection standard of 257.95(h) only applies to groundwater releases. This would not apply to non-groundwater releases if the unit is in a detection monitoring program.					
Determination that remediation is not necessary	Proposed 257.97(f)	257.97(f)	X			
	Comment: Kansas uses the language from the 3/15/18 proposed rule, 83 FR 11613, with the substitution of terms discussed in the first section of this checklist. In paragraph (f)(2)(ii), Kansas replaces "waters" with "a potential drinking water source". If the release of an appendix IV constituent is not hydraulically connected to a potential drinking water source (i.e., actual or potential downgradient receptors, there is not a hydraulic pathway present for the contaminant to migrate to any receptors. **See Narrative, Section VIII B, Flexibility 8.** The phrase "to which the constituent(s) is migrating or <u>are</u> likely to migrate" was modified to read "to which the constituent(s) is migrating or <u>is</u> likely to migrate" for grammatical consistency.					
Implementation of the corrective action program	257.98, except: • 257.98(a)(1) • 257.98(b) • 257.98(c) • 257.98(c)(1) • 257.98(e) Proposed 257.98(c)(2) Proposed 257.98(c)(4)	257.98, except: • 257.98(a)(1) • 257.98(b) • 257.98(c) • 257.98(c)(1) • 257.98(c)(2) • 257.98(e) 28-29-744	X			

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Establish and implement a corrective action groundwater monitoring program	257.98(a)(1)	257.98(a)(1)	X			
	Comment: Kansas adds language to clarify that the corrective action groundwater monitoring program only applies to groundwater releases.					
Implement other methods or techniques	257.98(b)	257.98(b)			X	
	Comment: Selection of other methods or techniques must be made in accordance with KCS 257.97, which includes the requirement for approval of the remedy by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Remedies considered complete when	257.98(c)	257.98(c)			X	
	Comment: Remedies are considered completed only after approval by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Demonstration of compliance with the groundwater protection standards	257.98(c)(1)	257.98(c)(1)	X			
	Comment: Kansas adds language to clarify that demonstration of compliance with the groundwater protection standards only applies to groundwater releases.					
Compliance with the groundwater protection standards for three years	Proposed 257.98(c)(2)	257.98(c)(2)	X			
	Comment: Kansas references KCS 28-29-744, rather than proposed 257.98(c)(4) [3/15/18 proposed rule, 83 FR 11614], for exceptions to the three-year compliance period.					
Alternative length of time to demonstrate compliance	Proposed 257.98(c)(4)	28-29-744	X			
	Comment: Kansas does not include proposed language 40 CFR 257.98(c)(4) from the 3/15/18 proposed rule, 83 FR 11614. Analogous provisions are found in KCS 28-29-744, which distinguishes between the processes for lengthening and shortening the demonstration period. Kansas also adds "the amount of CCR, if any, remaining in the unit" as a factor to consider.					
Notification stating that the remedy has been completed	257.98(e)	257.98(e)	X			
	Comment: In the last sentence of the paragraph, the term "report" is replaced with "notification" for consistency with the first sentence of the paragraph.					
Corrective action procedures to remedy eligible non-groundwater releases	Proposed 257.99, except: • 257.99(a) • 257.99(c)(1) • 257.99(c)(3) [From the 3/15/18 proposed rule, 83 FR 11614.]	257.99, except: • 257.99(a) • 257.99(c)(1) • 257.99(c)(3) • 257.99(e)	X			
Completely remediated within 180 days	Proposed 257.99(a)	257.99(a) 28-29-745(a)-(c)			X	
	Comment: Kansas requires a preliminary report of the non-groundwater release within 90 days of detection. The secretary must approve the corrective action plan except under certain conditions. The period of time the proposed plan is under review does not count towards the 180-day deadline. Review by the regulatory agency provides an additional level of environmental protection. **See Narrative, Section VIII B, Flexibility 9a.**					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Completely remediated within 180 days	Proposed 257.99(a)	28-29-745(d)	X			
	Comment: The owner or operator may request an extension to the 180-day deadline for circumstances beyond the facility's control. The secretary may impose additional requirements, as appropriate, as a condition of the extension. **See Narrative, Section VIII B, Flexibility 9b.**					
Notification of discovery of a non-groundwater release	Proposed 257.99(c)(1)	257.99(c)(1)	X			
	Comment: Kansas reiterates the requirement [based on the combination of 40 CFR 257.99(c)(1), 257.105(h)(15), and 257.106(h)(12)] that KDHE must be notified with 15 days of discovery of a non-groundwater release.					
Report documenting the completion of the corrective action	Proposed 257.99(c)(3)	257.99(c)(3)	X			
	Comment: In the third and fourth sentences of the paragraph, the term "notification" is replaced with "report" for consistency with the first two sentences of the paragraph.					
Comply with the requirements of KCS 28-29-745	No analog in 257 Subpart D	257.99(e)	See note below			
	Comment: Kansas directs the reader to the requirements of KCS 28-29-745, which are addressed in preceding sections of this checklist.					
Constituents for detection monitoring	Appendix III to Part 257	28-29-741(a)(1)	X			
Constituents for assessment monitoring	Appendix IV to Part 257	28-29-741(a)(2)	X			
	Comment: Kansas does not include boron in the Appendix IV list of constituents. Boron is not included in Appendix IV in the federal regulations which are currently in effect, but it is proposed for addition to Appendix IV in the 3/15/18 proposed rule, 83 FR 11616. Kansas will make a final decision on whether or not to include boron in Appendix IV after EPA finalizes the proposed amendments to 257 Subpart D.					
Closure and Post-Closure Care						
Inactive CCR surface impoundments	257.100, except: • 257.100(a) • 257.100(e)(1) • 257.100(e)(2)	257.100, except: • 257.100(a) • 257.100(e)(1) • 257.100(e)(2)	X			
Same requirements as existing CCR surface impoundments - except location restriction demonstrations	257.100(a)	257.100(a)	X			
	Comment: Kansas does not require inactive surface impoundments to complete location restriction demonstrations, because the consequence of failing a demonstration is that the unit must stop taking waste and initiate closure activities, and these units are already in the closure process. **See Narrative, Section VIII B, Flexibility 10.**					
Eligible for alternative timeframes	257.100(e)(1)	257.100(e)(1)	X			
	Comment: The reference to paragraph (e)(2) is removed, since Kansas will not require inactive surface impoundments to complete location restriction demonstrations.					
Location restrictions	257.100(e)(2)	257.100(e)(2)	X			
	Comment: Paragraph (e)(2) is reserved, since Kansas does not require inactive surface impoundments to complete location restriction demonstrations.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Closure or retrofit of CCR units	257.101, except: • 257.101(a)(1) • 257.101(b)(1)	257.101, except: • 257.101(a)(1) • 257.101(b)(1)	X			
Constituents above protection standard	257.101(a)(1)	257.101(a)(1)	X			
	Comment: Kansas adds a reference to KCS 28-29-751 - see the following discussion of KCS 28-29-751.					
Waiver to surface impoundment closure requirement	No analog in 257 Subpart D	28-29-751	X			
	Comment: KCS 28-29-751 allows the secretary to grant waivers to surface impoundment closure requirements if the owner or operator can make certain demonstrations and public notice regarding the waiver request has been held. **See Narrative, Section VIII B, Flexibility 11.**					
Failure to demonstrate compliance with location standards	257.101(b)(1)	257.101(b)(1)	X			
	Comment: Kansas adds a reference to KCS 28-29-751 – see the preceding discussion of KCS 28-29-751.					
Materials allowed in units closing for cause - stromwater	No analog in 257 Subpart D	28-29-752(a) and (b)	X			
	Comment: KCS 28-29-752 clarifies that units required to close under certain provisions of KCS 257.101(a) and (b) may be used for stormwater management. Since stormwater entering a surface impoundment is not a solid waste, it does not fall under the general prohibition on placement of non-CCR wastestreams in units required to close.					
Criteria for conducting the closure or retrofit of CCR units	257.102, except: • 257.102(c) • 257.102(d)(3)(ii) • proposed 257.102(d)(4) • 257.102(e)(2)(ii) • 257.102(f)(2)(i) • 257.102(h) • 257.102(i)(1) • 257.102(i)(4) • 257.102(k)(6)	257.102, except: • 257.102(c) • 257.102(d)(3)(ii) • proposed 257.102(d)(4) • 257.102(e)(2)(ii) • 257.102(f)(2)(i) • 257.102(h) • 257.102(i)(1) • 257.102(i)(4) • 257.102(k)(6)	X			
Closure by removal of CCR	257.102(c)	257.102(c)	X			
	Comment: With regard to constituent concentrations, Kansas replaces the text "have been removed" with "are at or below background concentrations" to clarify the requirement. Kansas also adds a reference to the alternative standards of KCS 28-29-753 – see following discussion of KCS 28-29-753					
Closure by removal of CCR: alternative standards	No analog in 257 Subpart D	28-29-753	X			
	Comment: KCS 28-29-753 allows the owner or operator to request one or both of the following to determine that removal and decontamination are complete: 1) Use of risk-based constituent levels rather than background; or 2) Use of appendix III constituents, if assessment monitoring has not been triggered. Public notice of the request is required. **See Narrative, Section VIII B, Flexibility 12a and Flexibility 12b.**					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Alternative final cover system design	257.102(d)(3)(ii)	257.102(d)(3)(ii)	X			
	Comment: The reference to "paragraphs (f)(3)(ii)(A) through (D)" is corrected to "paragraphs (d)(3)(ii)(A) through (D)". Kansas also adds a reference to the alternative standards of KCS 28-29-754 – see following discussion of KCS 28-29-754.					
Alternative final cover systems	No analog in 257 Subpart D	28-29-754	X			
	Comment: KCS 28-29-754 allows the secretary to grant waivers to one or more of the final cover system requirements if the owner or operator can make certain demonstrations and public notice regarding the waiver request has been held. **See Narrative, Section VIII B, Flexibility 13.**					
Use of CCR for closure	Proposed 257.102(d)(4)	257.102(d)(4)	X			
	Comment: Kansas replaces language from the 3/15/18 proposed rule, 83 FR 11614-11615, with a reference to KCS 28-29-752 – see following discussion of KCS 28-29-752.					
Materials allowed in units closing for cause – use of CCR or non-CCR waste for closure	Proposed 257.102(d)(4)	28-29-752(a) and (c)	X			
	Comment: KCS 28-29-752 allows the secretary to grant requests to use CCR or non-CCR material as part of closure activities if the owner or operator can make certain demonstrations and public notice regarding the request has been held. **See Narrative, Section VIII B, Flexibility 14.**					
Additional time to initiate closure of the idle unit	257.102(e)(2)(ii)	257.102(e)(2)(ii)			X	
	Comment: Kansas modifies the paragraph to include the following provisions: 1) documentation supporting an extension must be submitted to KDHE; and 2) extensions may be secured only with the approval of the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Extensions of closure timeframes	257.102(f)(2)(i)	257.102(f)(2)(i)			X	
	Comment: Kansas modifies the paragraph to include the following provisions: 1) demonstration supporting an extension must be made to KDHE; and 2) extensions may be secured only with the approval of the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
	257.102(f)(2)(i)	257.102(f)(2)(i)	X			
	Comment: Kansas replaces "factors beyond the facility's control" with "factors beyond the owner or operator's control". This change was made to improve the clarity of the paragraph. Kansas also replaces "two-year period" with "previous extension period", because landfill extensions occur in one-year increments.					
Notification of closure of a CCR unit	257.102(h)	257.102(h)	X			
	Comment: Kansas reiterates the requirement [based on the combination of 40 CFR 257.102(h), 257.105(i)(8), and 257.106(i)(8)] that KDHE must be notified with 30 days of completion of closure of the CCR unit.					
Deed notations	257.102(i)(1)	257.102(i)(1)	X			
	Comment: Kansas requires that the deed notation or other instrument be in a format provided by KDHE and comply with the requirements of K.A.R. 28-29-20, Restrictive covenants and easements.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Units that close by removal of CCR	257.102(i)(4)	257.102(i)(4)			X	
	Comment: Kansas reserves the right to require a restrictive covenant at units that close by removal of CCR if deemed necessary to protect human health and safety and the environment.					
Notification of completion of retrofit activities	257.102(k)(6)	257.102(k)(6)			X	
	Comment: Kansas reiterates the requirement [based on the combination of 40 CFR 257.102(k)(6), 257.105(j)(6), and 257.106(j)(6)] that KDHE must be notified with 30 days of completion of retrofit of the CCR unit. The unit may be returned to use only after the retrofit has been approved by the secretary in accordance with KCS 28-29-770. Review by the regulatory agency provides an additional level of environmental protection.					
Alternative closure requirements	257.103, except: • Introductory paragraph Proposed 257.103(b) and (d)	257.103, except: • Introductory paragraph 28-29-755				
Introductory paragraph	Proposed introductory paragraph	Introductory paragraph	X			
	Comment: Kansas adds language from the 3/15/18 proposed rule, 83 FR 11615, concerning non-CCR wastestreams.					
	Proposed introductory paragraph	Introductory paragraph	See comment below			
	Comment: Kansas does not include the references to paragraphs (c) and (d) from the 3/15/18 proposed rule, 83 FR 11615, because Kansas is not adding the proposed new paragraphs.					
	Introductory paragraph	Introductory paragraph			X	
	Comment: Kansas states that the owner or operator may continue to place waste in the unit only if approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
No alternative capacity for non-CCR wastestreams	Proposed 257.103(b) and (d)	28-29-755	X			
	Comment: Kansas does not include the language in paragraphs (b) and (d) of the 3/15/18 proposed rule, 83 FR 11615; instead Kansas will use the simplified provisions of KCS 28-29-755. **See Narrative, Section VIII B, Flexibility 15.**					
Post-closure care requirements	257.104, except: • 257.104(a)(2) • 257.104(b) • 257.104(b)(2) • 257.104(b)(3) • 257.104(c)(1) • 257.104(d)(iii) • 257.104(e) Proposed 257.104(c)(3)	257.104, except: • 257.104(a)(2) • 257.104(b) • 257.104(b)(2) • 257.104(b)(3) • 257.104(c)(1) • 257.104(d)(iii) • 257.104(e) KCS 28-29-756	X			
Applicability – closure by removal of CCR	257.104(a)(2)	257.104(a)(2)	See comment below.			
	Comment: Kansas adds a reference to KCS 28-29-753, which contains alternative standards for closure by removal of CCR.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Post-closure care maintenance requirements	257.104(b)		X			
	Comment: Kansas adds a reference to KCS 28-29-756, which allows the secretary to modify the post-closure care requirements.					
Leachate collection and removal system	257.104(b)(2)	257.104(b)(2)	X			
	Comment: Kansas adds a reference to KCS 28-29-721, which allows the secretary to grant waivers to certain design criteria.					
Maintaining the groundwater monitoring system and monitoring the groundwater	257.104(b)(3)	257.104(b)(3)	X			
	Comment: Kansas adds references to article 29, article 34, and the Kansas CCR Standards.					
Post-closure care period	257.104(c)(1)	257.104(c)(1)	See comment below			
	Comment: Kansas does not add the reference to paragraph (3) from the 3/15/18 proposed rule, 83 FR 11616; instead Kansas adds a reference to KCS 28-29-756, Modifications to postclosure care. See following discussion of proposed 257.104(c)(3)/KCS 28-29-756.					
Alternate post-closure care period	Proposed 257.104(c)(3)	KCS 28-29-756			X	
	Comment: Kansas does not add paragraph (3) from the 3/15/18 proposed rule, 83 FR 11616; instead Kansas has established analogous provisions in KCS 28-29-756. The length of time a postclosure care activity must be conducted is established separately for each activity, rather than establishing a single period for all postclosure care activities. Maintenance of the final cover system must continue for at least 30 years.					
Disturbance of the final cover, liner, or other component of the containment system	257.104(d)(iii)	257.104(d)(iii)			X	
	Comment: Kansas requires that disturbance of the final cover, liner, or other component of the containment system is allowed only if the secretary approves the demonstration that the disturbance will not increase the potential threat to human health or the environment. Review by the regulatory agency provides an additional level of environmental protection.					
Notification of completion of post-closure care period	257.104(e)	257.104(e)	X			
	Comment: Kansas reiterates the requirement [based on the combination of 40 CFR 257.104(e), 257.105(i)(13), and 257.106(i)(13)] that the notification must be submitted to KDHE.					
	257.104(e)	257.104(e)			X	
	Comment: Kansas states that the post-closure care period is considered complete only upon approval by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Recordkeeping, Notification, and Posting of Information to the Internet						
Recordkeeping requirements	257.105, except: • 257.105(b) • 257.105(d) Proposed 257.105(h)(14)-(16), except: • 257.105(h)(16) Proposed 257.105(i)(14)	257.105, except: • 257.105(b) • 257.105(d) 257.105(h)(14)-(16), except: • 257.105(h)(16) 257.105(i)(14)	X			
Document retention	257.105(b)	257.105(b) and 28-29-761	X			
	Comment: KCS 28-29-761 contains state-specific document retention requirements.					
Submittals to the department	257.105(d)	257.105(d)	X			
	Comment: Kansas deletes the provision that states information must only be submitted to the state upon request if it is not available on the facility's internet site. Kansas references KCS 28-29-762, which contains state-specific document submittal requirements.					
Document submittal requirements	257.105(d)	257.105(d) and 28-29-762	X			
	Comment: KCS 28-29-762 contains state-specific document submittal requirements.					
Documents to be submitted	No analog in 257 Subpart D	28-29-763	X			
	Comment: This standard specifies which documents are required to be submitted to KDHE.					
Groundwater monitoring and corrective action	Proposed 257.105(h)(14)-(16)	257.105(h)(14)-(16)	X			
	Comment: Kansas adds paragraphs 257.105(h)(14)-(16) from the 3/15/18 proposed rule, 83 FR 11616, except in paragraph 257.105(h)(16), the reference to "257.99(c)(2)" is corrected to read "257.99(c)(3)."					
Closure and post-closure care	Proposed 257.105(i)(14)	257.105(i)(14)	X			
	Comment: Kansas adds paragraph 257.105(i)(14) from the 3/15/18 proposed rule, 83 FR 11616.					
Notification requirements	257.106, except: • 257.106(a) • 257.106(b) Proposed 257.106(h)(11)-(13) Proposed 257.106(i)(14)	257.106, except: • 257.106(a) 257.106(h)(11)-(13) 257.106(i)(14)	X			
Notification deadline; exception to notification requirement	257.106(a)	257.106(a)	X			
	Comment: Kansas replaces the term "federal holiday" with the term "state holiday". Kansas does not require notification for items that have been submitted to KDHE.					
CCR units in Indian Country	257.106(b)	No analog in KCS	X			
	Comment: Kansas does not include this paragraph concerning CCR units in Indian Country.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Groundwater monitoring and corrective action	Proposed 257.106(h)(11)-(13)	257.106(h)(11)-(13)	X			
	Comment: Kansas adds paragraphs 257.106(i)(11)-(13) from the 3/15/18 proposed rule, 83 FR 11616.					
Closure and post-closure care	Proposed 257.106(i)(14)	257.106(i)(14)	X			
	Comment: Kansas adds paragraph 257.106(i)(14) from the 3/15/18 proposed rule, 83 FR 11616.					
Publicly accessible Internet site requirements	257.107 Proposed 257.107(h)(11)-(13) Proposed 257.107(i)(14)	257.107 257.107(h)(11)-(13) 257.107(i)(14)	X			
Groundwater monitoring and corrective action	Proposed 257.107(h)(11)-(13)	257.107(h)	X			
	Comment: Kansas adds paragraphs 257.107(i)(11)-(13) from the 3/15/18 proposed rule, 83 FR 11616.					
Closure and post-closure care	Proposed 257.107(i)(14)	257.107(i)(14)	X			
	Comment: Kansas adds paragraph 257.107(i)(14) from the 3/15/18 proposed rule, 83 FR 11616.					
Approvals						
Additional Kansas Provisions						
Document approvals	No analog in 257 Subpart D	28-29-770	X			
	Comment: This standard contains the general requirements which must be met for a document to be approved the secretary.					
Previously certified documents; amendments	No analog in 257 Subpart D	28-29-771	X			
	Comment: This standard clarifies KDHE's recognition of documents that were certified and placed in the operating record before the effective date of the Kansas CCR Standards. It also clarifies that amendments to documents must be approved by the secretary.					
Approval of location, design, and construction	No analog in 257 Subpart D	28-29-772			X	
	Comment: This standard specifies which KDHE approvals are necessary before construction of the CCR unit may begin and before waste may be placed in the unit. Review by the regulatory agency provides an additional level of environmental protection.					
Approval of permit documents	No analog in 257 Subpart D	28-29-773			X	
	Comment: This standard specifies which KDHE-approved permit documents the facility is required to have. Review by the regulatory agency provides an additional level of environmental protection.					
Approval of retrofit, closure, and postclosure documents	No analog in 257 Subpart D	28-29-774			X	
	Comment: This standard specifies which KDHE-approved closure, postclosure, and retrofit documents the facility is required to have. Review by the regulatory agency provides an additional level of environmental protection.					

Requirement	Federal RCRA Citation (40 CFR)	Analogous State Citation (KCS)	State Analog Is*			
			EQ	LP	MP	BIS
Approval of closure documents	No analog in 257 Subpart D	28-29-775			X	
	Comment: This standard clarifies that time calculations used to determine the reduction or termination of postclosure care activities and the calculation of postcosure care financial assurance will begin only after certain documents are approved by the secretary. Review by the regulatory agency provides an additional level of environmental protection.					
Plans and Reports						
Additional Kansas Provisions						
CCR unit design plans	No analog in 257 Subpart D	28-29-781	X			
	Comment: This standard specifies what items need to be included in CCR unit design plans.					
Construction quality assurance plans and reports	No analog in 257 Subpart D	28-29-782	X			
	Comment: This standard specifies the requirements for construction quality assurance plans and reports.					
Facility operating plans	No analog in 257 Subpart D	28-29-783	X			
	Comment: This standard specifies what items need to be included in facility operating plans.					
Groundwater monitoring plans and reports	No analog in 257 Subpart D	28-29-784	X			
	Comment: This standard specifies the requirements for groundwater monitoring plans and additional requirements for groundwater monitoring reports.					
Closure plans	No analog in 257 Subpart D	28-29-785	X			
	Comment: This standard specifies additional requirements for closure plans.					
Postclosure plans	No analog in 257 Subpart D	28-29-786	X			
	Comment: This standard specifies additional requirements for postclosure plans.					